The Covert PMO: Thomas Cutting explains how to deliver great projects when you're outnumbered, outgunned and weary to the bone. **PAGE 27**

COMPUTERWORLD®

PLAYING HARD TO Get

Enterprises are finally getting serious about Apple. But is Apple really serious about them? **PAGE 18**

#BXBBJFT**********AUTO**5-DIGIT 48103
#1154488/CB/2# 0902 001 21 041

NATIONAL ARCHIVE PUBLISHING 81
PO BOX 998
300 N ZEEB RD
ANN ARBOR MI 48103-1553

Inside

JANUARY 12, 2009
VOL. 43, NO. 2 $5/COPY

News Analysis

A breach at Twitter may force IT execs to look for more secure social networking options. **PAGE 8**

A push is on for open mobile networks. But don't hold your breath. **PAGE 10**

THE GRILL: Agile programming advocate Christophe Louvion tells why Post-it notes are sometimes the best development tools. **PAGE 14**

Opinion

Most CIOs are dinosaurs: out of place and headed for mass extinction. **PAGE 17**

Careers

Does telework boost productivity – or sap it? **PAGE 32**

Don't Miss . . .

A security manager sweats as the budget ax falls on disaster recovery. **PAGE 28**

Revolutionize your communications without a PBX renovation.

Now you can transition to VoIP with innovative software from Microsoft. Software that integrates with Windows Server® Active Directory® services, Microsoft® Office, Microsoft Exchange Server, and your PBX. Keep your PBX in place and still get new voice capabilities like drag-and-drop conferencing, anywhere access, and click-to-call functionality from familiar desktop applications. A software-powered VoIP solution, based on Microsoft Office Communications Server 2007, helps you increase the productivity and flexibility of your workforce—especially your mobile users. Change the way you communicate without changing your PBX. Learn more at microsoft.com/voip

Your potential. Our passion.

Microsoft

Inside

COMPUTERWORLD ■ JANUARY 12, 2009

■ NEWS DIGEST

4 Microsoft announces a **public beta** of **Windows 7** and gives IT a tool kit for **blocking IE8** from automatically installing on PCs.

5 Offshore outsourcer **Satyam** faces a **crisis** after its chairman admits to **accounting fraud** and resigns. | Hackers seed **LinkedIn** with bogus celebrity profiles that link to **malicious Web sites**.

6 An **appeals court** will soon rule on whether **Kentucky** can shut down **online gambling sites** registered outside the state.

■ NEWS ANALYSIS

8 Hack Forces Twitter Into 'Full Security Review.' Security breaches at Twitter may prompt corporate IT to think twice about using the popular microblogging service.

10 Open Networks Remain a Distant Nirvana for Mobile Users. Although Google, the FCC and other organizations are pushing to make mobile networks more open, true wireless freedom of choice may be a pipe dream.

■ OPINION

2 Editor's Note: Don Tennant is looking for IT leaders able to fix a broken executive compensation system.

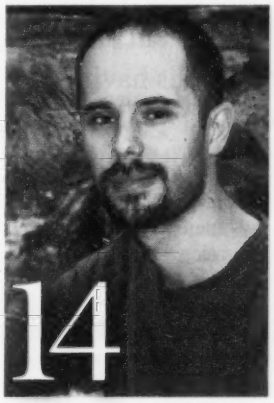
17 Thornton May says most CIOs are dinosaurs: out of place in the world that is taking shape, and headed for mass extinction.

30 Paul Glen thinks what stands between IT people and panic is how managers confront today's realities and tomorrow's fears.

36 Frankly Speaking: Frank Hayes is alarmed that in 2009 a simple password-guessing program can result in a major hack.

■ DEPARTMENTS

14 The Grill: Agile development advocate **Christophe Louvion** talks about how Scrum works, who's agile and who's not, and when a Post-it note can be the best development tool.



27 IT Mentor: The Covert PMO. Thomas Cutting explains how to produce great projects when you're outnumbered, outgunned and weary to the bone.

28 Security Manager's Journal: Budget Ax Falls on Disaster Recovery. Execs figure eliminating the DR budget will cut the costs of new projects in half. But to J.F. Rice, it feels like living on the edge.

32 Career Watch: Studying the effects of telework on productivity; and are you a Pisces who loves his job?

34 Shark Tank: If you ask for suggestions, you never know what you'll get.

■ ALSO IN THIS ISSUE

Online Chatter	3
Company Index	34

■ FEATURES

18 Playing Hard to Get

COVER STORY: For years, debates have raged over whether Apple is a full-fledged enterprise citizen. Now, more businesses want Apple, but does Apple want them?

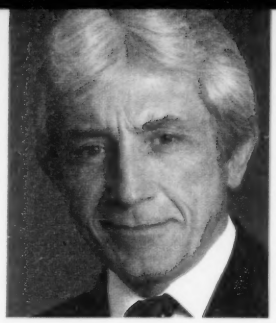
24 Swift Translation

COMPUTERWORLD HONORS: Deaf Link's videoconferencing systems give the hearing-impaired access to round-the-clock, on-demand sign language interpreting services.

■ EDITOR'S NOTE

Don Tennant

Unshared Pain



LAST OCTOBER, there was an article on *StarTribune.com*, the Web site of the Minneapolis-St. Paul daily, about Ameriprise Financial in Minneapolis having reported a loss of $70 million for its third quarter. Several readers who posted online comments about the story claimed that the loss had resulted in layoffs and that more were expected. One reader said that the layoffs included "many" technology workers. If that's true, imagine how disgusted those workers would have been if they'd known that their boss was enjoying a compensation package in excess of $6 million.

According to Janco Associates, an IT consulting firm in Utah, the salary of Glen Salow, executive vice president of service delivery and technology at Ameriprise, is $475,000, but financial attaboys have made him a multimillionaire. If that disturbs you, you'll be more disturbed to learn he is hardly unique.

As *Computerworld*'s Patrick Thibodeau reported last week, a recent Janco study found that while IT executives in general are taking a hit because of the economy, some CIOs aren't sharing the pain.

Bob DeRodes recently left his job as CIO at The Home Depot to become chief technology officer at First Data. The offer must have been extremely attractive, given that at Home Depot, he was raking in almost $5.2 million. With a salary of about $700,000, the extras seem fairly generous. Actually, "obscene" is probably a more fitting description, when you consider that the retailer announced in May that it was eliminating 1,300 jobs and closing 15 stores. According to Bloomberg News, Home Depot earlier in the year laid off 500 people from its headquarters and acknowledged that another 1,000 cuts might be made.

Joseph Antonellis, meanwhile, is doing quite well for himself as CIO at State Street Corp. in Boston. According to the Janco report, Antonellis draws a salary of $669,000. You might presume that State Street has been faring pretty well, since Janco says the CIO's total compensation was $6.3 million, nearly 10 times his salary. But you'd be very wrong. Just last month, *The Boston Globe* reported that State Street plans to cut 1,600 to 1,800 jobs, or 6% of its workforce, through the first quarter of 2009.

■ A system that rewards some so lavishly while so many others are stripped of their means of livelihood is a broken one.

There are other examples, but these are certainly enough to make it clear that a question raised by a reader who posted a comment on Thibodeau's story is a fair one.

"Add about 25-30% onto [my salary], for benefits, and that is my 'compensation package,' " the reader wrote. "My 'compensation package' is nowhere near 10 times my salary as these people are getting. How many people have they laid off to maintain that level of compensation?"

Another reader chalked it all up to greed and made no attempt to hide his disgust. "Corporate America really needs to have good leaders," he wrote, "not greedy leaders."

This is where the discussion gets especially interesting. Can these people who accept millions in compensation, knowing that their companies are axing hundreds of jobs as a means of saving money, be considered good leaders?

There's no question in my mind that the ones I've cited are extremely accomplished and have outstanding leadership qualities. I know that because all three have been honored by *Computerworld* for those very attributes.

It so happens that DeRodes, Salow and Antonellis are *Computerworld* Premier 100 IT Leaders, from the classes of 2001, 2004 and 2005, respectively. As anyone who has any familiarity with the Premier 100 program knows, its honorees are truly exemplary.

So yes, DeRodes, Salow and Antonellis are indeed good leaders. And I'm confident that the leaders who have reached the highest levels tend to be the ones who worked the hardest, and should be compensated accordingly.

But a system that rewards some so lavishly while so many others are stripped of their means of livelihood is a broken one. It appears it will take even better leaders than the ones we have now to fix it. ■

Don Tennant *is* Computerworld's *senior editor-at-large. You can contact him at don_tennant@computerworld.com, and visit his blog at* http://blogs.computerworld.com/tennant.

RESPONSES TO:

Small Laptops Pose A Big Security Threat

Dec. 22, 2008

SSDD — same song, different deployment. We hear the same scary song every time a new form of technology is hot. It is time to get past this and actually do something. Train everyone that all technology regardless of form factor has risks and that with the use of technology to store, process, transmit, display or otherwise access data in any of its forms comes a responsibility to protect it — just as we teach people basic life skills: how to read, write and function within society.
■ **Submitted by:** *Anonymous*

I don't see anything here specific to ultraportables except that they are small and their size may encourage people to carry them more often, and to more places, thus increasing the chance of losing them.

One upside is that ultraportables are low-end. They can't hold entire databases of credit cards, customer information, etc. You probably won't read about a lost ultraportable that had 50,000 customer Social Security and credit card numbers.
■ **Submitted by:** *Anonymous*

Users have no clue about security, and the more entry points, the more risk. It is just a numbers game. Wireless is insecure to the dumb user because they don't have a clue what they are connecting to. So if they connect to a wireless access point that is a rogue unit, then — boom! — all data is collected and can be used to gain entry to all the credit card databases that user connects to. It is not so much that the credit card database is on the laptop as it is what that laptop connects to.
■ **Submitted by:** *Anonymous*

Pretty much *every* laptop can be compromised the moment it's taken out of the box. That's why Microsoft and every major Linux distribution offers a security patch update service.
■ **Submitted by:** *Anonymous*

JOIN THE CHATTER! *You, too, can comment directly on our stories, at* **computerworld.com**.

COMPUTERWORLD.COM

Find these stories at computerworld.com/more

10 Must-Have Free BlackBerry Apps

These BlackBerry applications – for browsing the Web, issuing voice commands, creating spreadsheets, reading e-books and more – can make your trusty smart phone even smarter.

Boss by Day, Gamer by Night

High-tech titans from Red Hat, Adobe, Cisco and other companies admit the truth: All they really needed to know they learned from … World of Goo?

Server Virtualization Quiz

So you think you're an expert on server virtualization? Take our quiz; you just might learn a few things.

The Linux Gadget Hall of Fame

The Nokia N770 Internet Tablet

Some of the most fascinating, fun and influential tech devices are based on Linux, which means there ought to be a Linux Gadget Hall of Fame. David Haskin names his picks for the first 10 inductees, including Amazon's Kindle e-reader and the G1 Android phone. What would you nominate?

Adobe Dreamweaver CS4

REVIEW: Should you upgrade to the latest release of Adobe's Web design application? "You betcha," says longtime user Ross M. Greenberg.

COMPUTERWORLD

P.O. Box 9171, 1 Speen Street
Framingham, MA 01701
(508) 879-0700
Computerworld.com

■ **EDITORIAL**

Editor in Chief Scot Finnie

Senior Editor-at-Large Don Tennant

Executive Editors Mitch Betts, Julia King (events)

Managing Editors Michele Lee DeFilippo (production), Sharon Machlis (online), Ken Mingis (news)

Design Director Stephanie Faucher

Technologies Editor Johanna Ambrosio

Features Editors Kathleen Melymuka, Valerie Potter, Ellen Fanning (special reports), Barbara Krasnoff (reviews)

Senior Editors Mike Barton (new media), Joyce Carpenter (blogs and projects)

Senior News Editor Craig Stedman

News Editors Mike Bucken, Marian Prokop

National Correspondents Gary Anthes, Julia King, Robert L. Mitchell

Reporters Sharon Gaudin, Matt Hamblen, Eric Lai, Lucas Mearian, Patrick Thibodeau, Jaikumar Vijayan

Contributing Reporter Gregg Keizer

Features Writer, Video Editor David Ramel

Assistant Managing Editor Bob Rawson (production)

Senior News Columnist Frank Hayes

Art Director April Montgomery

Research Manager Mari Keefe

Senior Copy Editors Eugene Demaitre, Monica Sambataro

Copy Editor Donna Sussman

Associate Editor, Community Ken Gagné

Office Manager Linda Gorgone

Contributing Editors Jamie Eckle, Preston Gralla, Tracy Mayor

■ **CONTACTS**

Phone numbers, e-mail addresses and reporters' beats are available online at *Computerworld.com* (see Contacts link at the bottom of the home page).

Letters to the Editor Send to letters@computerworld.com. Include an address and phone number for immediate verification. Letters will be edited for brevity and clarity.

News tips newstips@computerworld.com

Subscriptions and back issues (888) 559-7327, cw@omeda.com

Reprints/permissions The YGS Group, (800) 290-5460, ext. 148, computerworld@theygsgroup.com

News Digest

FIND THE FULL STORIES AT
COMPUTERWORLD.COM

THE WEEK AHEAD

MONDAY: Rebooting Computing, a three-day summit aimed at developing an action plan to "recover the magic and beauty of computer science," opens in Mountain View, Calif.

TUESDAY: In its monthly software patch release, Microsoft plans to issue a single security fix for Windows. And Oracle is due to release 41 patches in its quarterly batch of updates.

THURSDAY: Intel reports its Q4 results. Last week, the chip maker lowered its revenue estimate for the second time.

Microsoft CEO Steve Ballmer detailed the Windows 7 beta during his opening keynote speech at the International CES event in Las Vegas.

OPERATING SYSTEMS

Microsoft Unveils Windows 7 Beta

AS ANTICIPATED, Microsoft Corp. CEO Steve Ballmer last week announced the first public beta version of Windows 7 at the International CES trade show.

The beta was scheduled to become available for download on Friday afternoon, although Microsoft at least temporarily postponed the release in order to add more "infrastructure support" to its Web site. That was driven by heavy traffic that overloaded the site hours before the beta code was even due to be posted.

Microsoft said the beta will be capped after the first 2.5 million downloads. But users who aren't able to obtain an activation key can still download the code and run it on a 30-day trial basis.

The beta, which Microsoft called "feature complete," requires a PC with a 1-GHz processor, 1GB of RAM, 16GB of available hard-disk space and support for DX9 graphics with 128MB of memory. The company noted that the recommended configuration may change for the final release.

In an interview at CES, Bill Veghte, Microsoft's senior vice president in charge of Windows, said the new operating system should be less of a resource hog than its predecessor, Vista.

"I don't want to make commitments on where we'll be at the [release to manufacturing date]," he said. "But at beta right now, we look very comparable to the hardware requirements that Windows Vista had when it came out, and the hardware has moved on. I am very optimistic."

Ballmer didn't disclose a final launch date for the operating system. Microsoft to date has said that it would deliver Windows 7 by about this time next year.

Some analysts, however, expect Microsoft to ship Windows 7 in time for this year's back-to-school and holiday shopping seasons. Vista shipped in early 2007, missing those crucial sales periods in 2006.

— Gregg Keizer, with James Niccolai of the IDG News Service

SOFTWARE

IT Gets Tool To Block IE8 Downloads

Microsoft Corp. last week made a tool kit available that IT staffers can use to block Internet Explorer 8 from automatically being installed on PCs when the browser is released later this year.

The tool kit is another hint that Microsoft is getting close to shipping IE8. In 2006, the vendor issued a blocker for IE7, then delivered the finished software less than three months later.

The blocker won't prevent users from manually installing IE8 or bar it from PCs running a beta copy of the browser.

In a blog post, IE program manager Jane Maliouta said Microsoft will push IE8 to users via its update services. But, she wrote, "we know many IT organizations will still want to test the browser before it is deployed."

The tool kit has two components: an executable script that creates a new Windows registry key to stymie automatic downloading, and a template for setting group policies.

– GREGG KEIZER

PHOTO BY DAVID McNEW/GETTY IMAGES

OUTSOURCING

Satyam's Future Up in The Air After Scandal

CUSTOMERS OF Satyam Computer Services Ltd. were left facing questions about its viability last week, after the India-based offshore outsourcing vendor's chairman admitted to orchestrating a fraudulent accounting scheme and resigned.

Satyam had already hired an investment banking firm late last month to review its "strategic options." But Chairman B. Ramalinga Raju's admission that the company had inflated its profits and cash holdings for several years plunged Satyam into a crisis.

Ram Mynampati, a Satyam executive who was named interim CEO last week, said at a press conference that company officials were trying to reassure customers that there would be no interruption in Satyam's IT services.

But Forrester Research Inc. analysts Sudin Apte and John McCarthy said in a Jan. 8 report that Satyam's ability to continue as an independent entity is in doubt. The analysts added that they expect customers and employees alike to "desert Satyam as a result of competitive wooing."

WORLD ECONOMIC FORUM

Satyam founder B. Ramalinga Raju resigned as chairman after admitting to accounting fraud.

Apte and McCarthy advised IT managers to monitor Satyam's performance against service-level agreements and analyze the feasibility of shifting systems to other outsourcing vendors or bringing them in-house.

"I think Satyam is in a very dire situation," said Peter Bendor-Samuel, CEO of Everest Group, a Dallas-based consulting firm. "If they aren't running out of cash now, it's probable that they will be very shortly."

Satyam is India's fourth-largest outsourcer. What it needs most of all is to hold on to customers such as automaker Nissan North America Inc., which signed a five-year application services deal with Satyam in 2006.

Nissan spokeswoman Katherine Zachary said the company is keeping an eye on the situation.

"We're taking appropriate steps to ensure the continuity of our systems and applications that are Satyam-supported, and we're going to continue to monitor the situation," Zachary said.

The National Association of Software and Services Companies, India's largest IT trade group, was quick to distance itself from Satyam, even though Raju is a former Nasscom chairman. "This is a stand-alone case of failure of corporate governance, and it is critical that it be viewed in this light," Nasscom said in a statement.

— Patrick Thibodeau, with John Ribeiro of the IDG News Service

Short Takes

Lenovo Group Ltd. plans to lay off 2,500 people, cut executive pay by 30% to 50% and restructure its Asian operations in the face of worldwide economic woes. The company hopes the moves can cut costs by $300 million in its fiscal year ending March 31, 2010.

Dell Inc. announced that it will move its European PC manufacturing operation from Limerick, Ireland, to Lodz, Poland, and lay off 1,900 workers as part of its continuing belt-tightening efforts.

EMC Corp. announced a restructuring plan that includes layoffs of 2,400 employees and a consolidation of back-office functions and offices. At the same time, the company said it expects to hit its fourth-quarter 2008 sales and profit goals.

Sun Microsystems Inc. has bought Q-layer NV, a Lochristi, Belgium-based supplier of software that automates the management of computing clouds. Terms of the deal were not disclosed.

SECURITY

LinkedIn Pages That Promise Prurient Pics Link to Malware

HACKERS LAST WEEK seeded LinkedIn Corp.'s business networking site with bogus celebrity profiles that link to malicious Web sites, according to security researchers.

Paul Ferguson, a researcher at Trend Micro Inc. in Cupertino, Calif., said hackers created phony profiles sporting links that users believed would lead them to photographs of nude celebrities. But the links instead shunted users to sites hosting malware. The celebrities named included singer Beyoncé and actresses Christina Ricci, Kirsten Dunst and Kate Hudson.

"They're using the same mechanism as earlier spam campaigns, telling users that they have to install a [video] codec," said Ferguson. The coder/decoder is actually a disguised Trojan horse.

Ferguson said that LinkedIn reacted quickly after the fake accounts first appeared last Tuesday. "Once they were notified, they quickly took them down," he said.

A major phishing campaign against Twitter last week (see story, page 8) is an example of an uptick in criminal activity on social networking sites that will only get worse, Ferguson predicted.

Cybercriminals are just trying to "get more eyeballs on their handiwork," he said, noting that they can attract users of social networks and take advantage of the proclivity of search engines to float sites such as LinkedIn and Facebook to the top of results lists.

In a statement, LinkedIn said it is "actively removing and suspending any users who violate our terms of use," in addition to "adding new technologies and security protocols."

– GREGG KEIZER

LEGAL ISSUES

Ruling Near on State's Plan To Seize Domain Names

THE KENTUCKY Court of Appeals is expected to issue a ruling soon on whether a state court can order the seizure of Internet domain names that are registered in another state or country.

The three-judge appeals panel is deliberating over whether to uphold a lower court's approval of a state plan to seize Internet domain names belonging to 141 online gambling sites.

Critics called the state's plan unconstitutional, illegal and unenforceable.

Jennifer Brislin, a spokeswoman for the Kentucky Justice and Public Safety Cabinet, said that the agency sought to shutter the sites last year to protect state residents from an "illegal, unregulated and untaxed industry."

In September, Judge Thomas Wingate of the state's Franklin County Circuit Court approved the agency's request, ordering registrars of each of the 141 domains to transfer ownership to the "account of the commonwealth" without configuration changes. Wingate stayed the order pending a ruling by the appeals court.

In a friend-of-the-court brief, Matthew Zimmerman, senior staff attorney at the Electronic Frontier Foundation, said the ruling is "unconstitutional and [was] made without jurisdictional authority."

Zimmerman said he expects that the appeals court will issue a ruling later this month.

Anita Ramasastry, director of the Shidler Center for Law, Commerce & Technology at the University of Washington School of Law in Seattle, added that the ruling, if upheld, is probably unenforceable because all of the Web sites are registered outside of Kentucky. "One state is suddenly opining and acting in a way that has implications for people all over," she said in a blog post.

Nonetheless, Zimmerman said that it's likely that some operators will comply with the ruling simply to avoid legal hassles or potential threats to their reputations.

— Jaikumar Vijayan

BETWEEN THE LINES *By John Klossner*

BENCHMARKS LAST WEEK

President-elect Barack Obama detailed his economic stimulus plan, which includes new funding for broadband rollouts, school computers and an Internet-based smart energy grid.

VMware Inc. hired Tod Nielsen, formerly Borland Software Corp.'s CEO, to be its chief operating officer. He and VMware CEO Paul Maritz worked at rival Microsoft Corp. in the past.

AT&T Corp. and the U.S. Department of Justice settled an antitrust case against the company, leading to the breakup of the Bell System.

Global Dispatches

EDS Settles U.K. Tax System Fiasco

LONDON – Electronic Data Systems Corp. made the final payment toward the £71 million ($108 million U.S.) settlement it reached with the British government over its failure to complete work on an £8.5 billion ($12.9 billion U.S.) tax-credit IT system.

The system was launched in April 2003, but problems quickly caused the government to make significant tax-credit overpayments. EDS stopped work in 2004, and the contract was taken over by Capgemini. In November 2005, EDS agreed to a settlement with the U.K.'s HM Revenue & Customs agency.

At first, EDS was slow to pay the settlement, prompting the U.K.'s Public Accounts Committee to say it would take EDS 106 years to pay off the government. The company declined to comment.

Leo King,
Computerworld U.K.

E-mailer Threatens Indian IT Firms

BANGALORE, India – E-mails sent to six IT companies based here, including outsourcing vendors Infosys Technologies Ltd. and Wipro Ltd., included threats to blow up corporate facilities in the city.

Police are tracking the author of the messages, which were sent from a location in Bangalore, said Gopal B. Hosur, the city's joint commissioner of police. The threats were sent during the week of Dec. 29, he noted.

Infosys confirmed that it had received a threatening e-mail. Wipro declined to comment.

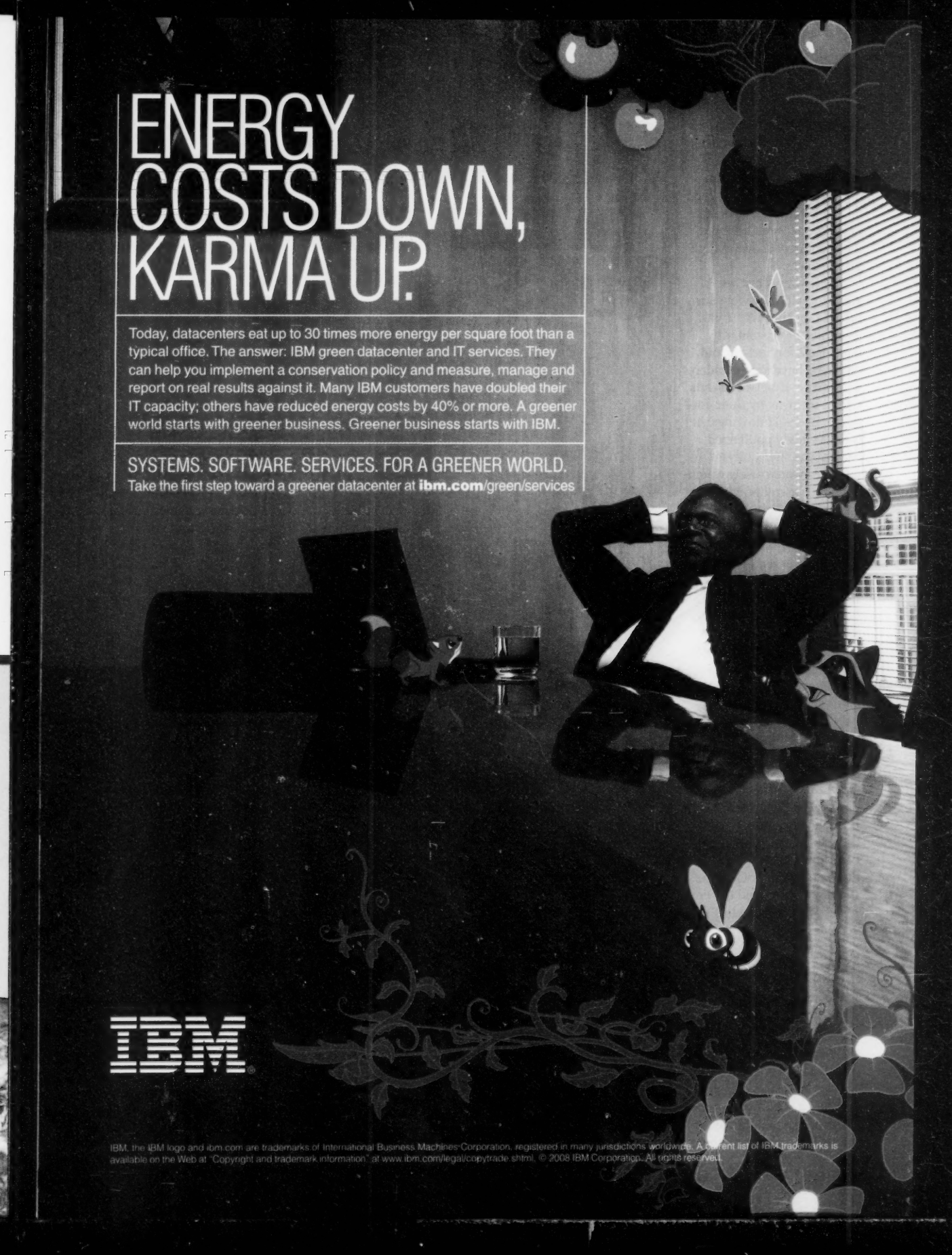
Security was tightened at IT firms in Bangalore after terrorists attacked sites in Mumbai in November, Hosur said.

John Ribeiro,
IDG News Service

BRIEFLY NOTED

The U.S. Department of the Treasury's Committee on Foreign Investment approved Advanced Micro Devices Inc.'s plan to jointly create a chip manufacturing company with the government of Abu Dhabi. AMD will own 34.2%, and a government-owned investment firm will control the rest.

Nancy Gohring,
IDG News Service


ENERGY COSTS DOWN, KARMA UP.
Today, datacenters eat up to 30 times more energy per square foot than a typical office. The answer: IBM green datacenter and IT services. They can help you implement a conservation policy and measure, manage and report on real results against it. Many IBM customers have doubled their IT capacity; others have reduced energy costs by 40% or more. A greener world starts with greener business. Greener business starts with IBM.
SYSTEMS. SOFTWARE. SERVICES. FOR A GREENER WORLD.
Take the first step toward a greener datacenter at ibm.com/green/services
IBM
IBM, the IBM logo and ibm.com are trademarks of International Business Machines Corporation, registered in many jurisdictions worldwide. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml. © 2008 IBM Corporation. All rights reserved.

Hack Forces Twitter Into 'Full Security Review'

Recent security woes could force IT to rethink how firms use the microblogging tool.

By Sharon Gaudin

TWITTER INC. has launched a comprehensive review of the defenses in its popular social network and microblogging service, after hackers last week hijacked the accounts of several high-profile users.

In interviews last week, analysts said they were surprised that sites like Twitter, which are potentially hot targets for hackers and phishers, have long avoided such major attacks and thus strong scrutiny by their corporate users. Following last week's widely publicized hack of the site, analysts said they were closely watching how Twitter and its corporate customers respond to the security breach.

"Certainly, with all the coverage Twitter has had about this, it will bring security to [Twitter's] attention," said Caroline Dangson, an analyst at research firm IDC.

"It reminds us that we're dealing with a medium that is less secure and we need to be more conscious of what we're putting out there and not take it for granted like we have," she added.

San Francisco-based Twitter confirmed last Monday that hackers had broken into the accounts of more than 30 celebrities and organizations, including President-elect Barack Obama, Britney Spears, and the Fox News and CNN cable TV networks.

The company said tools used by its support team were illegally accessed and used to send malicious messages, many of them offensive, from the compromised accounts.

The network was breached just two days after identity thieves launched a phishing campaign that tried to dupe users of the microblogging service into divulging their usernames and passwords.

In a blog post on the company's Web site, Twitter co-founder Biz Stone said he considers last week's compromise to be "a very serious breach of security."

In an e-mail to *Computerworld*, Stone said, "We're doing a full security review on all access points to Twitter." The first steps will be to "strengthen the security surrounding sign-in" and to further restrict access to the company's own support tools, he said.

Ken van Wyk, principal consultant at KRvW Associates LLC in Alexandria, Va., said that although individual users are unlikely to change microblogging habits because of the breach, IT managers should move quickly to evaluate how such incidents could affect their firms.

"We're seeing [Twitter] used more and more for communications between managers and employees," he said. "I suspect that a few of those folks might have a knee-jerk reaction to something like this and stop using it."

Van Wyk noted that the breach could inspire some IT organizations to develop applications that provide Twitter-like capabilities for in-house use.

Dangson recommended that companies evaluate potential alternatives to Twitter or more-secure complementary tools to use with the service. "We're not going to see a lot of people stop using [Twitter] because of this, but they might consider other forms of communication — more closed networks for certain information they're trying to share," she said. "I think people will be more cautious, but they won't stop using Twitter."

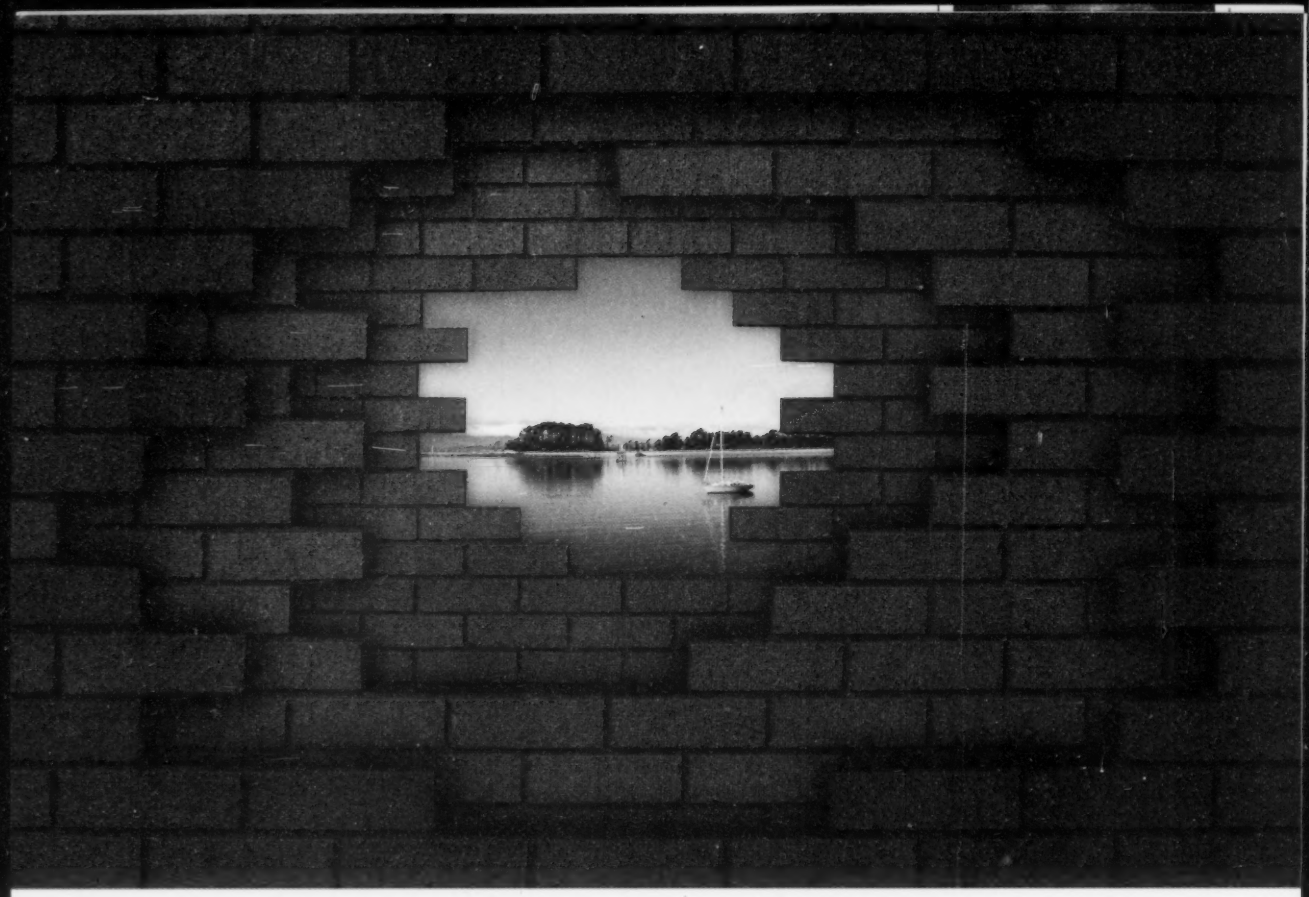
Stone said that he expects corporate users will see Twitter's "reaction and immediate behavior" following the breach as "a signal that we're serious about security and supporting commercial use."

As for home users, van Wyk said, "I don't think people will say, 'Hey, now this place is corrupt.' I suspect [Twitter] will come away unscathed."

However, he added, "I think it would be good for companies to suffer a little bit when there's a major security breach. If they come through unscathed, where is the lesson? Where's the push to improve security?" ■

Gregg Keizer *contributed to this article.*

CARBON
COUNTING
FOR BEAN
COUNTERS.
IBM collaboration software and services connect people faster wherever they are, which means less jet fuel, energy and money. And IBM software's advanced deduplication and data compression can lower the energy and space costs of your collaboration infrastructure by up to half. A greener world starts with greener business. Greener business starts with IBM.
SYSTEMS. SOFTWARE. SERVICES. FOR A GREENER WORLD.
See the green demo at ibm.com/green/collaboration
IBM
IBM, the IBM logo and ibm.com are trademarks of International Business Machines Corporation, registered in many jurisdictions worldwide. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml. © 2008 IBM Corporation. All rights reserved.



■ NEWS ANALYSIS

Open Networks Remain a Distant Nirvana For Mobile Users

Google and others are pushing for wireless freedom of choice. Don't hold your breath. **By Matt Hamblen**

THE PUSH for open wireless networks that can accommodate all manner of mobile devices and applications grabbed a lot of headlines last year. But true mobile openness remains a distant, and perhaps unachievable, nirvana.

For now, mobile users aren't appreciably better off from an openness standpoint than they were at the start of 2008. And that likely won't change for years to come, according to Jack Gold, an analyst at J.Gold Associates LLC in Northboro, Mass. " 'Open' still has a long way to go," Gold said.

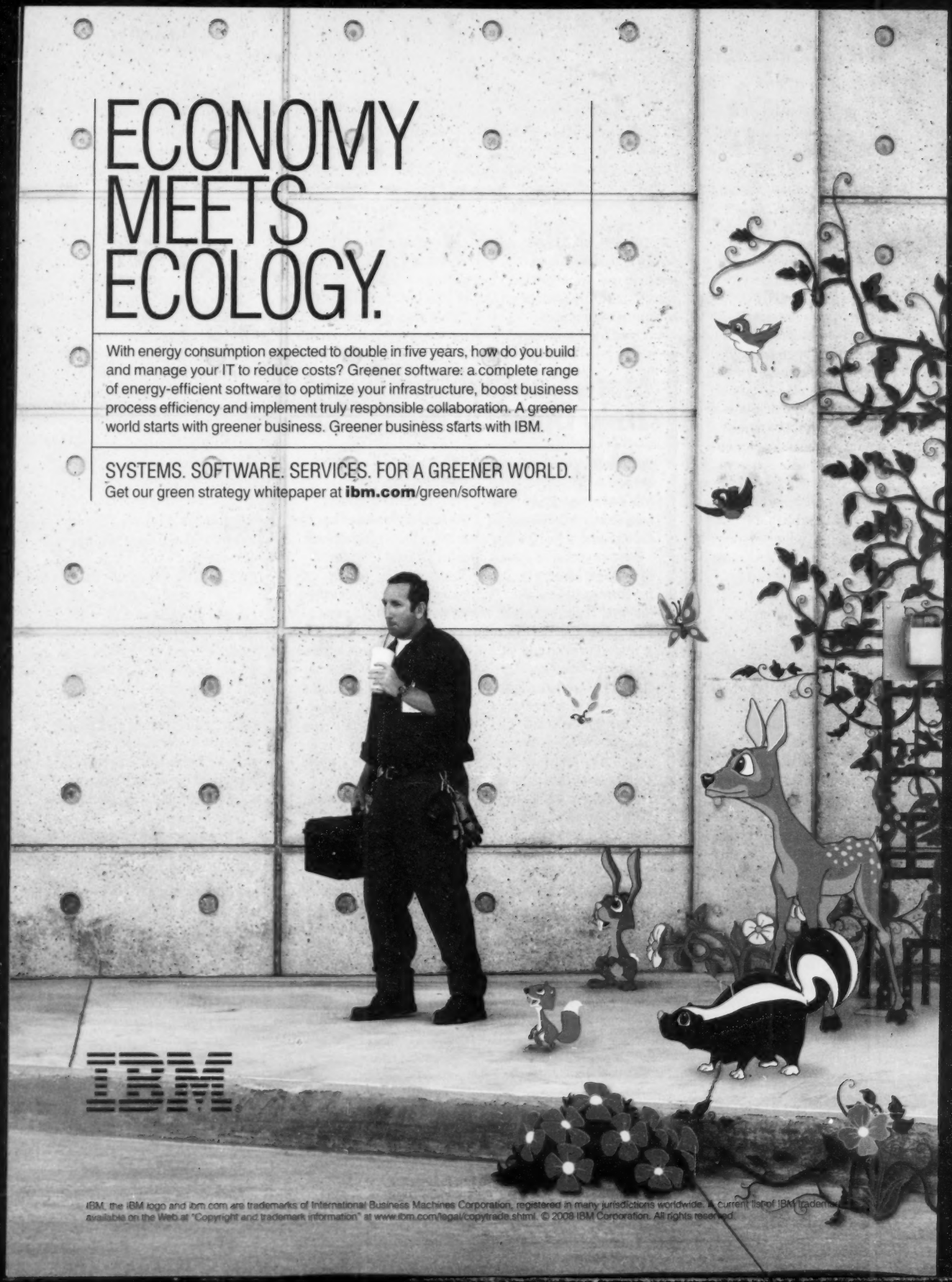
The dim assessment by Gold and other mobile-industry analysts comes despite recent moves by Google Inc., the Federal Communications Commission and other organizations aimed at making it possible to run any application on any device on any network.

While that level of openness may never be reached, the FCC did set aside part of the 700-MHz wireless spectrum for open network access as part of an auction that was completed last March. Google was instrumental in lobbying for the inclusion of the open-access rules in the auction process.

In addition, Google last year pushed forward its Android mobile software platform through the Open Handset Alliance, which released an open-source version of the Android code in October. And last month, the alliance added 14 members, including network operators Softbank Mobile Corp. and Vodafone Group PLC and handset makers

Continued on page 12

© FOTOLIA / TEZZER


ECONOMY MEETS ECOLOGY.
With energy consumption expected to double in five years, how do you build and manage your IT to reduce costs? Greener software: a complete range of energy-efficient software to optimize your infrastructure, boost business process efficiency and implement truly responsible collaboration. A greener world starts with greener business. Greener business starts with IBM.
SYSTEMS. SOFTWARE. SERVICES. FOR A GREENER WORLD.
Get our green strategy whitepaper at ibm.com/green/software
IBM
IBM, the IBM logo and ibm.com are trademarks of International Business Machines Corporation, registered in many jurisdictions worldwide. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml. © 2008 IBM Corporation. All rights reserved.

Continued from page 10

such as Toshiba Corp. and Sony Ericsson Mobile Communications AB. That increased the alliance's membership to 47 companies.

Also, the first Android-based cell phone, the T-Mobile G1, was jointly introduced in September by Google, T-Mobile USA Inc. and hardware maker HTC Corp. Even before the G1's debut and the open-sourcing of Android, other vendors reacted. For example, Nokia Corp. in June announced plans to make its Symbian mobile operating system an open and royalty-free platform.

Despite such forward momentum, *open* is still a relative term in the mobile market. One paradox of Google's openness campaign is that even the G1 is locked to T-Mobile USA's network. Similarly, the iPhone is locked to AT&T Inc.'s mobile network in the U.S., and Research In Motion Ltd.'s new BlackBerry Storm works only on the Verizon Wireless network.

A CLUTTERED MARKET

Meanwhile, software developers still have to separately design their applications to run on as many as six major mobile operating systems, with Windows Mobile and Palm OS also in the mix. For example, as attractive as Apple Inc.'s iPhone App Store is, the applications available there won't work on other phones unless they're specifically written for those devices as well.

"The handset world is far from [being] commodity-oriented, write-once/run-anywhere, like the PC market is," Gold said. He predicted that the market will remain "dispersed over many device and platform choices" far into the future.

And the problem isn't just a theoretical one facing high-minded vendors and Washington policy wonks. Take the case of Jacquelyn Pourroy, a chef who works in Boston. She recently switched from a BlackBerry Storm to an iPhone, partly because the Apple device works smoothly with her Macintosh computer.

But when she converted, she lost access to RealNetworks Inc.'s Rhapsody music service. The service isn't compatible with Macs, Pourroy noted in an e-mail. "That's a bummer, because I like the option of [using] Rhapsody," she wrote.

Gold and other analysts think network operators are primarily to blame for the lack of meaningful movement toward real openness and freedom of choice.

All wireless devices still have to be approved by carriers before they can be used on their networks — a fact that limits the ability of handset makers to innovate, Gold contended. "Imagine if PC vendors had to test and get approval for each brand of PCs out there," he said. "That would drastically alter the computing market."

Gartner Inc. analyst Phillip Redman said that "cellular networks have been so locked down" for so long that "even a little openness would be a good thing." But at this point, he said, there isn't even a good working definition of what would constitute an open wireless network.

He urged participants in the debate to agree upon a basic set of openness guidelines, then seek oversight from an industry group or regulatory body that could impose fines if carriers failed to meet the guidelines.

AT&T, Verizon Wireless and Sprint Nextel Corp. all have openness initiatives in place. For example, Sprint is a member of the Open Handset Alliance, and AT&T has joined the Symbian Foundation, which plans to begin operations within the next six months.

AT&T spokesman Mark Siegel noted in an e-mail that his company sells a multitude of devices running different operating systems for use on its network. "We think that's what openness is all about," Siegel wrote, adding, "No customer comes into a phone store saying, 'Give me openness.' "

In an e-mail interview, Google officials said they didn't want to single out any one openness effort as being more important than others. But they praised the FCC for moving to promote more-open mobile platforms and networks, and said there may be a need for "further nudging" by the government to ensure that progress continues to be made.

"In essence, we would like to see the wireless world look more like the Internet," wrote Richard Whitt, Google's Washington-based counsel for telecommunications and media. "Hopefully, policymakers will consider stepping in — in a tailored way — if carriers fail to follow through on the early promise of open platforms for applications and devices."

The Internet's "openness ethos" has given Google and countless other companies a chance to thrive, Whitt said. What the mobile market needs, he contended, is the same kind of approach. ■

More Competition Might Help Open Up Networks

Open mobile networks might be more likely to become a reality if wireless carriers faced heightened competition, said Gartner analyst Ken Dulaney.

Network operators "have been the big inhibitor in the growth of the mobile Internet," Dulaney claimed. The carriers could be forced to give up some control, he said, if the likes of Apple or Google began offering their own connectivity services.

That might never happen. But new competition is expected to come from the Clear mobile WiMax service being deployed by Clearwire Corp. under a joint venture with Sprint Nextel that was finalized in early December.

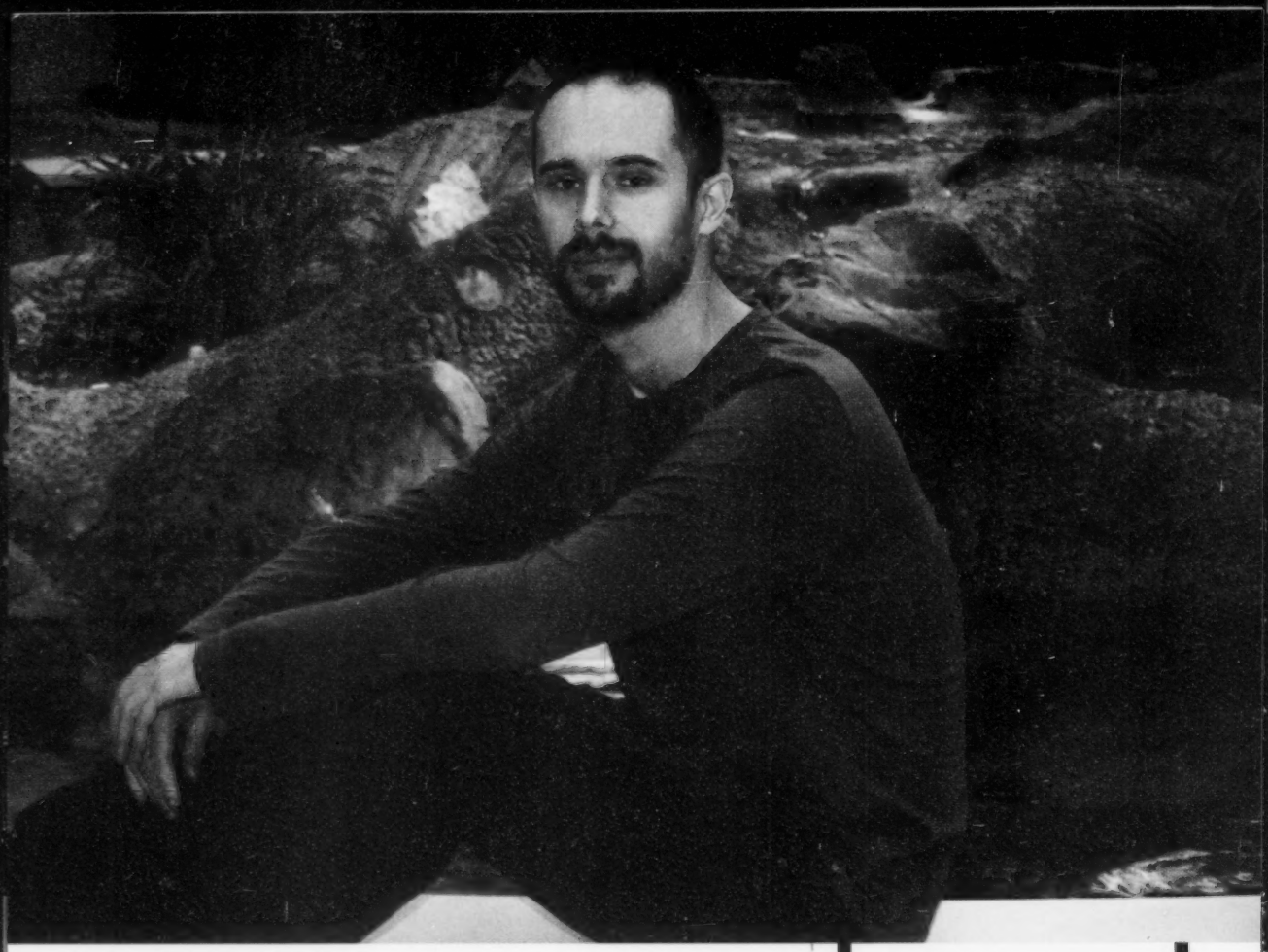
Clearwire, which also has received $3.2 billion in investments from Google, Intel Corp. and three cable TV companies, launched the high-speed service in Portland, Ore., last week. Portland is the second city in which the WiMax network is live; in September, Sprint Nextel made the service available in Baltimore under its own Xohm brand name.

In another example of potential added competition, cable operator Cox Communications Inc. said in October that it's building a cellular network to offer mobile voice, data and entertainment services in the markets where it does business.

The network is scheduled to go live in four unidentified locations this year, according to Comcast, which also will use Sprint's wireless network to begin offering mobile services in other areas.

– MATT HAMBLEN

IBM
ECO CONSCIOUS.
CFO CONSCIOUS.
IBM's Smart SOA approach can help you increase control and visibility of your business processes while limiting your carbon impact. With IBM's help, companies like Citigroup have reduced application-processing time from two weeks to two days. Efficiency goes up. Energy costs go down. A greener world starts with greener business. Greener business starts with IBM.
SYSTEMS. SOFTWARE. SERVICES. FOR A GREENER WORLD.
See our Webcast on greener processes at ibm.com/green/soa
IBM, the IBM logo, ibm.com and Smart SOA are trademarks of International Business Machines Corporation, registered in many jurisdictions worldwide. A current list of IBM trademarks is available on the Web at "Copyright and trademark information" at www.ibm.com/legal/copytrade.shtml. Other company, product and service names may be trademarks or service marks of others. © 2008 IBM Corporation. All rights reserved.



■ THE GRILL

Christophe Louvion

The **agile development** advocate talks about **how Scrum works,** who's agile and who's not, and **when a Post-it note might be the best** development tool.

Christophe Louvion joined online ad network Gorilla Nation last January from comparison-shopping Web site Shopzilla.com (formerly BizRate.com), where he was vice president of engineering. The 35-year-old native of France is a devotee of lean/agile product development and is a certified agile coach and ScrumMaster. (Scrum is an agile process characterized by self-directed teams, and projects broken into small chunks.) Louvion is in the process of becoming a certified Scrum coach — the black belt of Scrum — of which there are only a handful worldwide today, he says.

What's the difference between agile and Scrum? It's like the difference between medicine and brain surgery. Scrum is just one way to implement agile, with a few of its own particular rules. One is that everyone is either

Continued on page 16

Dossier

Name: Christophe Louvion

Title: Chief product/technology officer

Organization: Gorilla Nation Media LLC

Location: Los Angeles

First job: Software engineer at BizRate.com 10 years ago

Favorite book: *Implementing Lean Software Development*, by Mary and Tom Poppendieck

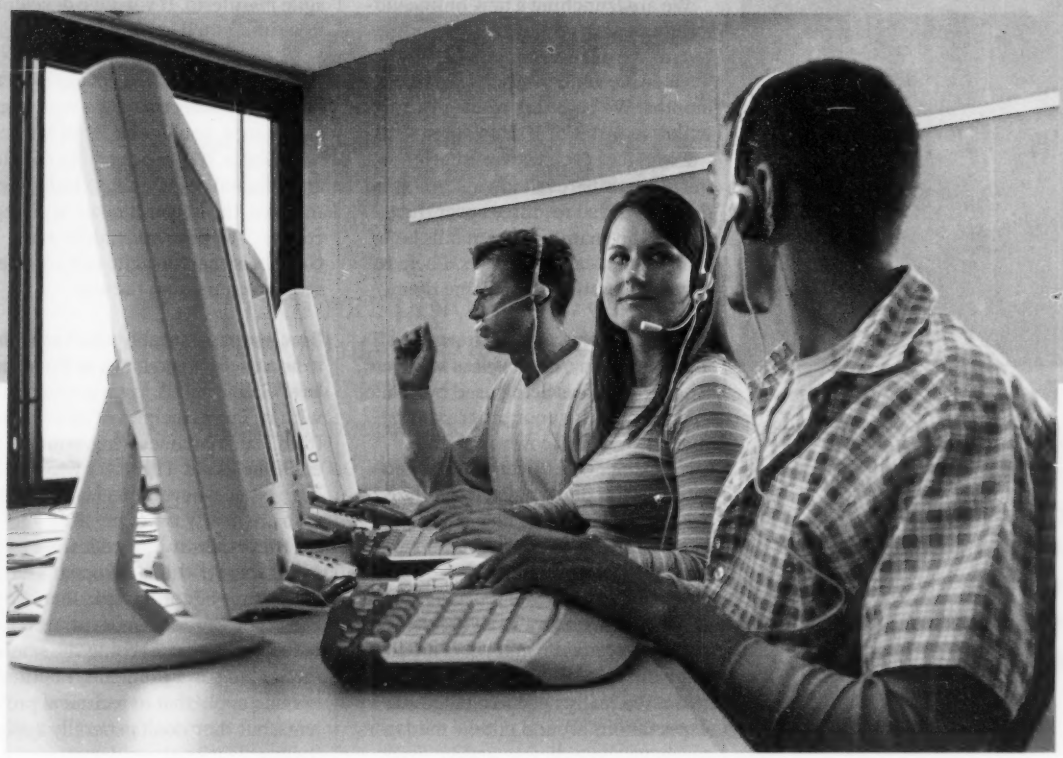
Passions outside of work: Kite surfing, and fine food and wines

Favorite consumer technology: The iPhone

Favorite programming tools: Sharpies and Post-it notes

Work with InterSystems.

Not separate systems.



The fastest way to have a connected workplace.

Work with InterSystems **Ensemble**® software to raise productivity and lower costs.

Ensemble is a rapid integration and development platform that makes it much easier to connect applications, processes, and people. IT managers who have switched from other integration products report they can finish projects in half the time with Ensemble.

For your future development efforts, if you embed Ensemble you can create a new class of applications that are connectable. Plus, you'll be able to enhance *legacy* applications with adaptable workflow, browser-based user interfaces, rules-based business processes, dashboards, and other innovations – without rewriting your code.

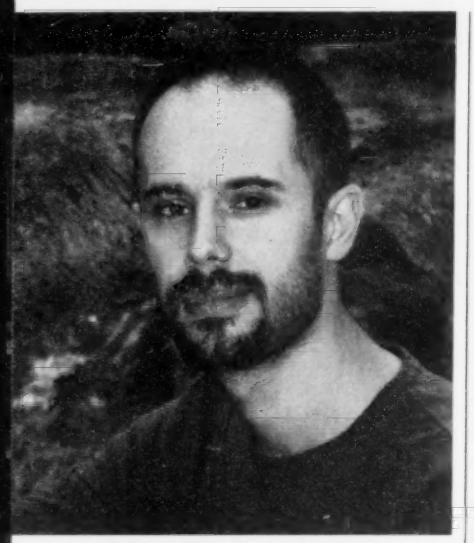
Ensemble includes InterSystems **Caché**®, the world's fastest object database. Caché's lightning speed, massive scalability, and rapid development environment give Ensemble unmatched capabilities.

For 30 years, we've been a creative technology partner for leading enterprises that rely on the high performance of our products. Ensemble and Caché are so reliable that the world's best hospitals use them for life-or-death systems.

INTERSYSTEMS

See product demonstrations at **InterSystems.com/Connect12A**

© 2009 InterSystems Corporation. All rights reserved. InterSystems Ensemble and InterSystems Caché are registered trademarks of InterSystems Corporation. Other product names are the trademarks of their respective vendors. 1-09 Work12 CoWo



"If a company has switched to agile programming and they haven't quadrupled their developer productivity in six months, they aren't doing it right.

Continued from page 14

the owner of the product to be built, the team delivering it or the ScrumMaster overseeing the two groups. Another is to deliver a new, working version of software at least every 30 days, preferably every two weeks.

Agile programming does not necessarily require such iterations. Agile is really about looking for ways to respond to change quickly.

How are you implementing agile and Scrum principles at Gorilla Nation? When I came to Gorilla Nation, I had to coach a lot of middle to upper managers on changes I wanted to make. For instance, I removed boundaries between departments — not just engineers and QA, but also non-IT areas such as HR, business development and operations.

Most companies are organized around functions, even though it's usually dysfunctional. I like to organize teams vertically by product and value streams. It's still a matrix. The engineers in business development and QA still report to their functional heads.

We are launching a new online video advertising product called Springboard. We put on our agile hat and decided we would launch in just two months. We built this whole platform with two teams of 11 developers total.

Every day, each team pushed code into a central area. If any team slowed down, I moved resources over there. There's no shame if a team falls behind. If one team has issues, I help resolve them rather than blame them.

Has agile become so mainstream that it's become a trendy, meaningless buzzword? The term *agile* is being used by [some] people to justify poor programming practices such as cowboy coding.

"We don't have to write documentation; we're doing agile," they'll say. Like with everything else, people are bending the rules to accommodate their personal preferences.

Can middle managers be an obstacle to agile? Most middle managers are like puppet masters, telling people what to do. We really need to change our expectations around middle managers, not have them dictate and be task-givers, but be impediment-removers.

If a company has switched to agile programming and they haven't quadrupled their developer productivity in six months, they aren't doing it right. After two years, they should be five to 10 times more productive than before.

Why do you say Sharpie markers and Post-it notes are your favorite developer tools? In general, tools are dangerous for teams new to Scrum. To teach math to a 10-year-old, you give him a piece of paper, not a calculator. I recommend a Sharpie marker, whiteboard and Post-it notes. For larger or distributed teams, I do recommend wikis or Scrum tools such as RallyDev.com.

Is it easier for certain types of companies – say, a Web firm like Google – to do agile? I think it has less to do with what industry you're in [than] whether your leader is willing to make the changes.

With Google, I think they have put a structure in place that attracts the best talent. Many of the things they released have been the result of employees' "20% time." I think it fits with the agile manifesto. If you give developers free time, you'll get a return back.

How about Microsoft? A lot of people say that it's obviously not agile. At any agile conference, you'll see a lot of Microsoft badges. There are plenty of teams at Redmond doing agile. The bigger the boat, the longer it takes to change course. The problem, unlike with Google, is that the agile culture doesn't seem to come from the top.

Does age or personality affect your ability to be an agile programmer of the highest level? I don't think age has much to do with it. The principles of agile came from lean manufacturing, which started in the 1960s. There are people who have been evangelizing lean since then who are nearly twice my age.

I think culture and education make a difference. I think Europeans have an easier time adopting agile than Americans. The European education system focuses more on teaching the scientific method to solve problems. Engineers here do apply that to technical problems, but they don't generally apply it to organizational problems.

But do you favor certain types of programmers anyway? I'm actually more interested in their soft skills, which are harder to teach than things like computer languages. So I look at how they manage conflicts and share information, whether they have honesty and integrity, how they say no and set expectations. Most engineers say yes to all of the requests they get. As a result, they end up doing a bad job with all of them.

But ensuring that the team can be productive is more important than who I hire. There is a good quote from the chairman of Toyota. Someone asked him, "What is Toyota's advantage?" He replied, "It is our ability to get normal people to do outstanding things. Other companies try to hire outstanding people to do normal things."

— *Interview by* **Eric Lai**

■ OPINION

Thornton A. May

CIOs Are Entering A Career Ice Age

MOST CIOs ARE DINOSAURS: out of place in the world that is taking shape, and headed for mass extinction.

For most people, the phrase "mass extinction" evokes images of an asteroid slamming into the Earth 65 million years ago, forever altering the course of life on the planet.

The instantaneous climate change that resulted wiped out the dinosaurs, who found themselves designed for conditions that suddenly no longer existed. They were not so much guilty of bad management as they were victims of a cosmological crapshoot. Paleontologist David Raup memorably described the fate of the big reptiles as "bad luck, not bad genes."

The mass extinction that IT professionals should be worried about will very nearly wipe out CIOs as we know them. You can be certain that it will happen; in fact, the events are already in motion. I predict that when the dust clears, 60% of the CIOs on the planet will not have survived to see the next era.

The asteroid has already hit. It is the macroeconomic meltdown now besetting the world's markets. As with the dinosaurs, there is no escape for most CIOs. They are doomed, though like the dinosaurs of the Cretaceous period, they may not know it yet. But man, the species from which CIOs are drawn, differs from dinosaurs in many ways, not the least of which is man's ability to predict and assess circumstances and in some cases to even willfully adapt.

Scientists tell us that animals avoid extinction in two ways. First, they adopt new behaviors that bestow competitive advantage in a changed environment. Second, they compete among their own kind for the affections of the opposite sex. CIOs certainly will need to find new competitive advantages in their new environment as they compete among their own kind for the affections of companies willing to hire them.

■ A CIO who tells his troops to hunker down for the rough ride ahead is leading them to the tar pits.

What will provide competitive advantage?

The skills needed in the new era were nicely summarized by Byron Reeves, a professor of communication at Stanford University, in a May 12 interview in *Computerworld*. Reeves said that what's needed is distributed decision-making, rapid response, the use of ad hoc teams, and leadership through collaboration rather than authority.

How do you or your CIO rate on these dimensions?

And how is your CIO responding to the current crisis?

If he's telling the troops to hunker down for the rough ride ahead, he's leading you straight to the tar pits. If he views the economic downturn as a huge opportunity, he just might find himself still standing in a few years.

One CIO I predict will survive is the financial services chief who told me he sees the soft economy as the "next Y2k." While everyone else is panicking, his organization is fine-tuning its IT infrastructure to generate competitive advantage.

Another good bet is the CIO in the oil patch who told me that "a crisis is a terrible thing to waste." What he sees in the meltdown is an opportunity for substantive change, since corporate politics-as-usual will be unable to survive the extreme pressure that's building.

Another good bit of advice I heard was from a senior IT leader in the Department of Defense who said that what a CIO does is "extract strategic value from IT — that is the only real function of a CIO."

The fact is that the CIOs who are emulating the dinosaurs, uncomprehendingly watching as the sun is blotted out and the vegetation withers, are just fossils waiting to happen.

The successful ones, embracing changes they can't forestall, will be more jazzed than ever about the next 12 to 18 months and the substantive impact that they, as IT leaders, will have on their organizations. ■

Thornton A. May *is a longtime industry observer, management consultant and commentator. You can contact him at thorntonamay@aol.com.*

LARRY GOODE

COVER STORY

PLAYING HARD TO Get

The enterprise might want Apple, but does Apple want the enterprise?

BY MARY BRANDEL

EIGHTEEN MONTHS AGO, Serena Software Inc. began exploring the feasibility of supporting Apple MacBooks as an option for its users, most of whom are developers. It was interested in lowering its support costs and increasing satisfaction among employees who used Macs at home, including the CEO.

Today, half of Serena's workers opt for MacBooks over Lenovo laptop PCs when they're hired or due for a hardware refresh, bringing the number of Apple users to about 100 out of 800 globally, according to Ron Brister, senior manager of worldwide IT operations at the Redwood City, Calif.-based maker of application development tools. Users like having a choice, and the number of support calls has declined.

"Gone are the days when IT dictates how people get their jobs done," says Brister. There have been no problems when it comes to interoperability with Serena's Windows-based data center. And thanks to a discount from Apple Inc., the MacBooks cost roughly the same as Lenovo ThinkPad T61 machines, according to Brister.

Anthony DeCanti, vice president for technology at Werner Enterprises Inc., a freight transportation company in Omaha, has a different story to tell. Five years ago, he brought Macs into the company to give users an alternative to Windows. But over the past two years, DeCanti has seen a steady decline in Apple's enterprise efforts.

"Two years ago, I would have been fired up and telling you this thing has

wheels," he says. "But I really feel like Apple has taken its eye off the ball for acceptance into the enterprise and put its efforts into the iPhone. From a shareholder's perspective, maybe that's a great idea, but from an enterprise standpoint, I really feel let down."

Thanks to the enthusiasm it has generated in the consumer market and the enterprise-friendly features it has added to the Mac and the iPhone, Apple will likely make inroads into more corporate environments, but gaining acceptance may not be easy. Even Mac veterans say that Apple doesn't always act like other technology partners and that mixing Macs into the enterprise requires time and research.

DeCanti lauds the Mac's "incredible elegance, great operating system and incredible graphics." However, his frustrations include poor Active Directory integration, Apple's exit from the storage hardware market and a lack of improvements in Apple's Safari browser.

Worse, whereas he used to get access to Apple engineers and insights into product road maps through annual meetings and executive briefings, that has ended, he says. As a result, DeCanti has decided to freeze Mac purchases while continuing to support the Apple machines Werner already has, including 250 desktops and 14 servers used for route optimization.

IS IT, OR ISN'T IT?

For years, religious wars have been waged over whether Apple is a full-fledged enterprise citizen. Recently, the pro-Apple argument has grown more compelling.

"There are fewer and fewer reasons not to choose Apple for the enterprise, as prices are competitive, the technology integrates well with most enterprise infrastructures, and there are very few things you can't do on the Mac, including running Windows," says Michael Gartenberg, an analyst at research firm Jupitermedia Corp. in Darien, Conn., and a *Computerworld* columnist. "It's harder to argue against keeping technology out when it does what people need it to do."

Enterprise Operating System Trends

2008	JAN.	FEB.	MAR.	APR.	MAY	JUN.
Windows	94.4%	92.2%	95.1%	94.9%	94.4%	94.9%
Mac	3.7%	4.2%	4.3%	4.4%	5.0%	4.5%
Linux	1.8%	3.5%	0.5%	0.6%	0.5%	0.5%
Other	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%

BASE: 50,000 ENTERPRISE USERS. PERCENTAGES MAY NOT EQUAL 100 BECAUSE OF ROUNDING.
SOURCE: FORRESTER RESEARCH INC., JULY 2008

And the company's iPhone now offers business-friendly features such as increased security, e-mail synchronization with Microsoft Exchange and a software developer's kit. On top of that, Apple's Intel hardware can now use virtualization software from VMware Inc. and Parallels Inc. to run Windows on the Mac.

But the most influential factor may be what analysts call the "halo effect" of the iPod and iPhone: the idea that people who use those devices outside of work will gravitate toward Macintosh computers and pressure their IT departments to support them.

The integration woes that companies like Werner are experiencing are an exception, Gartenberg says. "There's always a degree of 'your mileage may vary,' depending on how you set the technology up — whether you're integrating Mac OS or Vista into the XP environment," he says.

But if you looked inside the companies that have been treating Apple as a first-class enterprise citizen for a while now, you'd see a mixed bag of satisfaction. Some users give Apple high marks for its performance as an enterprise player, while others, such as DeCanti, don't. And there are those like Brister, who are in the middle.

Though happy with Apple's technology, Brister is critical of the company's support, global delivery capability and opaque approach to sharing product plans. "I think Apple in the enterprise is something they've not put a lot of focus on," he says.

Ken Dulaney, an analyst at research firm Gartner Inc., agrees that — business-friendly iPhone efforts aside — Apple is not fundamentally an enterprise-oriented organization. But he has witnessed the halo effect and says that the Mac can work in a mixed environment, particularly for companies using browser-based applications.

However, "an enterprise-friendly organization would provide staff to go into the enterprise to support them, they'd give customers visibility into future products, they'd provide detailed lists of changes every time they released a device," Dulaney says. "That's not something Apple does today. They want to do just enough to get past the enterprise barriers involved."

While Apple will support the kinds of customers it wants to have, like Disney or Nike, Dulaney says, "if you're talking Ford Motor Co., I'm not sure that's in the cards. The enterprise market takes time and effort."

Gartenberg acknowledges that Apple hasn't made a major push into the enterprise, but he thinks it's in the cards. He points to the next major OS X release, currently called Snow Leopard, which promises integration with Microsoft Exchange. "It's just a series of slow steps that allow Apple to become a credible player in the market," he says. "As we move into 2009 and 2010,

Continued on page 22

"I really feel like Apple has taken its eye off the ball for acceptance into the enterprise. . . . From an enterprise standpoint, I really feel let down.

ANTHONY DeCANTI, VICE PRESIDENT FOR TECHNOLOGY, WERNER ENTERPRISES INC.

ITS JOB IS TO HELP MAKE YOURS MORE PRODUCTIVE.

intel Xeon inside Powerful. Efficient.

IBM System x3350 Express

$1,849

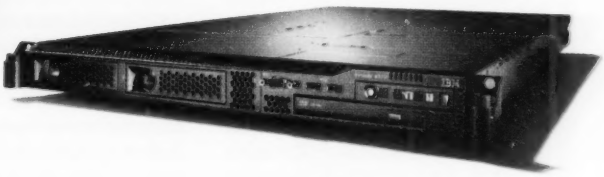
OR $48/ MONTH FOR 36 MONTHS[1]

Stop doing those routine tasks that tie you up for hours. IBM System x3350 Express monitors your infrastructure from a single point of control. Proactively identifies potential problems. And helps you solve them quickly. Let System x servers take on more routine tasks, so you can take on more challenges.

From the people and Business Partners of IBM.

It's innovation made easy.

THE SERVER THAT PRACTICALLY MANAGES ITSELF.



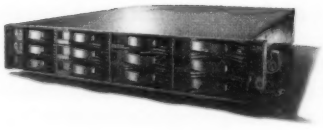
PN: 4193E2U

Featuring Intel® Xeon® Processors X3330 (2.66 GHz/1333 MHz), 6 MB L2 QC, 2x2 GB, open bay SAS 2.5" HS

Predictive Failure Analysis and Light Path Diagnostics; redundant, hot-swappable power supplies and fans; and up to 4 hard disk drives

3-year, next business day, on-site limited warranty[2]

IBM has more ways to help you get more done.



IBM SYSTEM STORAGE DS3200 EXPRESS **$4,495** OR $117/ MONTH FOR 36 MONTHS[1]

PN: 172621X

Up to six 3.5" SAS or SATA HDDs or up to eight 2.5" SAS HDDs and internal tape backup option for storage protection

Integrated RAID capability, -0, -1 and -1.0; RAID-5 optional

Comes with a 3-year on-site limited warranty[2] on parts and labor. 3-year 24x7 on-site repair (PN: 21P2078) with a 4-hour response is available for an additional $600

IBM Express "Bundle and Save"

We bundle our Express systems to give you the accessories you need – while saving you money on the hardware you want. Act now. Available through **ibm.com** and IBM Business Partners.

IBM express advantage™

ibm.com/systems/simplifyit

1 866-872-3902 (mention 6N8AH14A)

1. IBM Global Financing offerings are provided through IBM Credit LLC in the United States and other IBM subsidiaries and divisions worldwide to qualified commercial and government customers. Monthly payments provided are for planning purposes only and may vary based on your credit and other factors. Lease offer provided is based on an FMV lease of 36 monthly payments. Other restrictions may apply. Rates and offerings are subject to change, extension or withdrawal without notice. 2. IBM hardware products are manufactured from new parts, or new and serviceable used parts. Regardless, our warranty terms apply. For a copy of applicable product warranties, visit: ibm.com/servers/support/machine_warranties or write to: Warranty Information, P.O. Box 12195, RTP, NC 27709, Attn: Dept. JDJA/B203. IBM makes no representation or warranty regarding third-party products or services, including those designated as ServerProven® or ClusterProven®. Telephone support may be subject to additional charges. For on-site labor, IBM will attempt to diagnose and resolve the problem remotely before sending a technician. On-site warranty is available only for selected components. Optional same-day service response is available on [select] systems at an additional charge.

IBM, the IBM logo, IBM Express Advantage, System x and System Storage are trademarks of International Business Machines Corporation in the United States and/or other countries. For a complete list of IBM trademarks, see www.ibm.com/legal/copytrade.shtml. Intel and Xeon are registered trademarks of Intel Corporation. All other products may be trademarks or registered trademarks of their respective companies. All prices and savings estimates are based upon IBM's estimated retail selling prices as of 8/20/08. Prices and actual savings may vary according to configuration. Resellers set their own prices, so reseller prices and actual savings to end users may vary. Products are subject to availability. This document was developed for offerings in the United States. IBM may not offer the products, features, or services discussed in this document in other countries. Prices are subject to change without notice. Starting price may not include a hard drive, operating system or other features. Contact your IBM representative or IBM Business Partner for the most current pricing in your geographic area. © 2008 IBM Corporation. All rights reserved.

COMPELLING Numbers

RECENT DATA backs up the notion that Apple's influence is growing.

On Oct. 21, Apple announced that it sold 2.6 million Macs in its fiscal fourth quarter, which ended Sept. 27. That represents 21% growth in sales from the same quarter a year earlier. And last month, Mac OS X's market share cracked the 9% mark for the first time, according to Net Applications Inc. Apple's operating system was used on 9.6% of the machines that accessed the 40,000 Web sites that Net Applications monitors. Windows' share was 88.7%, marking the first time it had fallen below 90% since Net Applications began tracking operating system use.

In terms of enterprise penetration, Forrester Research says that Mac OS use rose from 3.6% in October 2007 to 4.5% in June 2008. Those figures are based on analysis of more than 50,000 customers connecting to Forrester's Web site.

According to Steve Jobs in his keynote address at the Apple World Wide Developers Conference in June, 35% of the Fortune 500 – including Disney, Oracle, Genentech and Kraft – are testing the iPhone's new enterprise features. Jobs also claimed that more than 250,000 developers have downloaded the iPhone development kit.

And five software companies – Atempo, Centrify, Group Logic, LANrev and Parallels – formed an alliance in June to promote the use of Macs in corporate environments. The group, dubbed the Enterprise Desktop Alliance, says its members' products enable IT organizations to deploy, integrate and manage Macs with the same tools they use for Windows. It claims that IT can achieve the same level of control, security, policy compliance and services that's currently possible with Windows.

– MARY BRANDEL

Continued from page 20

we'll see a strong, concerted effort to go after this market in a big way."

When contacted for this story, Apple declined to comment on its enterprise strategy, but Ezra Gottheil, an analyst at Technology Business Research Inc. in Hampton, N.H., says the company's strategy is to focus on the end user.

"They're happy to support the enterprise," Gottheil says. But "Apple doesn't want any disturbance to their strategic center of balance, which is oriented toward the end user." That means the company will be reluctant to make any compromises to design or product decisions based solely on the needs of the enterprise, he says.

He does find it interesting, however, that Apple recently hired Yale School of Management Dean Joel Podolny to serve as vice president of a new program called Apple University. It's not yet clear what the program's goals are, but Gottheil says the move could signal a forthcoming increase in responsiveness to enterprise needs.

There seem to be strong parallels between Apple's infiltration into the enterprise and those of other consumer-based technologies such as social networking tools, hosted e-mail and blogs.

That's the trend Brister wanted to get ahead of when he began looking at MacBooks a year and a half ago. "When people can choose different ways of getting their job done, they're more productive and happier," he says.

Brister was a fan of Mac technology anyway, and he wasn't happy with the performance of other laptops that Serena had tried. "They were all equally bad in different ways," he says.

With the MacBook, Brister sees lower failure rates and gets fewer support calls. Most users are now running applications directly on Mac OS rather than using VMware's Fusion virtual machine software to run Windows on their Macs, or they're using cloud-based software such as Google Docs.

Fusion users tell Brister that applications run better in an image on the Mac than they do on Lenovo hardware. And costs are competitive, he says.

Brister does say that he wishes Macs had docking stations, and he says Apple falls down in its support offerings. For instance, because the vendor offers no on-site service, when machines need repairs, he must take them to Apple stores or ship them to Apple. Meanwhile, employees must do without their computers. "I don't want to keep spare machines around that I'm paying depreciation on," he says.

Another problem is acquiring Macs for Serena's offices in Europe, where Apple requires purchases in quantities greater than the offices need. Apple is addressing this problem, Brister says, but he notes that he hasn't seen any progress in six months. Meanwhile, if he purchased units at retail stores, he wouldn't get the discounts he has negotiated, and "it would be an accounting nightmare," he says.

DeCanti agrees that it's difficult to supply global offices with Mac equipment; for Werner's Shanghai office, the closest Apple facility is in Hong Kong.

Brister also finds it troublesome that Apple provides no product road maps, although he says that he was once warned to hold off on making a purchase because a new product was to be released the following week. "Anything we have to go on is rumors," he says, pointing to new MacBooks that didn't feature the quad-core technology and default 4GB of RAM that some had expected.

DeCanti says he thinks Apple is no longer focusing on advancing Mac integration into the Windows world. For instance, he says, while Apple has promised better integration with Active Directory, it hasn't reached a level that makes Macs easy to use in that environment. "There are hacks that have gotten us so far, but the connectivity is fragile and hard to maintain," he says.

Gartner's Dulaney says the best way to support Macs in a mixed enterprise is to use browser-based applications. "There's little capability to do client/server integration where there's code on both sides," he says. But DeCanti also runs into trouble using Apple's Safari browser, because it's not supported on a lot of Web sites. Earlier, Apple had been proactive about garnering more

support for its browser, but those efforts, too, have dropped off, he says.

DeCanti says it's disheartening to no longer see enterprise-level products like the Xserve server featured on Apple's home page and to hear that Apple discontinued its Xserve RAID product. And while Apple engineers used to seek input from Werner users, "it seems they've really pulled back," he says. "It's disappointing for those of us who've been working to get the product to work well in the enterprise."

In terms of support, it's difficult to find third-party consultants, DeCanti says. The last one he used has since been hired by Apple. He feels fortunate to have found a local Macintosh-certified repair person to provide on-site service.

"Apple would probably be quite pleased for [the third-party support] ecosystem to be stronger, but at the same time, they're probably impinging on resellers' business by expanding the retail network," Gottheil says.

"Where people can choose different ways of getting their job done, they're more productive and happier.

RON BRISTER, SENIOR MANAGER OF WORLDWIDE IT OPERATIONS, SERENA SOFTWARE INC.

A PARALLEL UNIVERSE

But some users contend that the perception that Macs don't play well in the enterprise is exaggerated. Ben Hanes, senior systems analyst at Children's Hospital Oakland Research Institute (CHORI) in Oakland, Calif., has supported Macs for more than five years. Half of the organization's 600 computers are Macs, with about two dozen running Parallels virtualization software.

CHORI's data center is a mix of Apple and Windows servers, with Windows running on the database and file servers, and Apple Xserve units running applications that touch the Web, including a mail server, a Web server and an iChat server. "I stick to the philosophy that whatever is on the perimeter is Apple technology, because it's proven to be secure," Hanes says.

According to Hanes, the Macintosh desktops plug into the network "just like a PC," thanks to products such as Group Logic's ExtremeZ-IP, which enables file- and printer-sharing between Mac desktops and Windows servers. Hanes says he has successfully integrated Macintosh desktops with Active Directory, using the "golden triangle" strategy, in which Mac clients authenticate with Active Directory while getting managed group settings from a Mac OS X server.

Hanes says his team has been successful at deploying Apple technology in part because it conducts a lot of research before making decisions, and staffers keep an open mind about what they use, including open-source technology. For instance, he says it took a year to establish that they would use Communigate Pro from Communigate Systems for CHORI's e-mail server. And they selected Sophos PLC's antivirus system because it enables Macs and PCs to be viewed on one console.

Hanes uses Apple's Xserve RAID technology but says the company's move away from storage doesn't concern him. "They've certified EMC software to work with Apple," he says, "so switching will be trivial."

As for support, CHORI has been certified as a self-service shop, which means it gets the same rights as Mac repair consultants, such as next-day parts delivery. A company needs 150 Macs to qualify, he says. Hanes also participates in Apple beta programs.

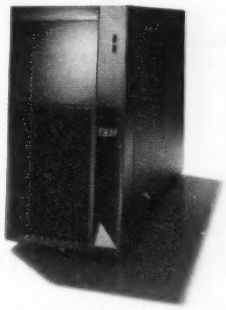
Whatever the future holds, it's clear that Apple is on a roll and that its popularity will undoubtedly propel more Macs into more enterprise settings. The question, Dulaney says, is how Apple will respond — and how fast.

"The challenge for Apple is they have this opportunity, and opportunities in IT don't last too long," he says. Although Apple undoubtedly will be towed deeper into the corporate world, it has a chance now to make a big enterprise splash, Dulaney says. "But it seems like they don't want to do that." ■

Brandel *is a* Computerworld *contributing writer in Newton, Mass. Contact her at marybrandel@verizon.net.*

ITS JOB IS TO SIMPLIFY YOURS.

IBM System x3500 Express
$1,625



Here's another way you can become more productive. IBM System x3500 Express affordably manages your IT network from one location, identifies potential problems before they happen, and keeps your downtime to a minimum. **It's innovation made easy.**

PN: 7977E7U

Featuring up to two Intel® Xeon® Processors E5420 2.50 GHz/1333 MHz-12 MB QC (80w) 2x1GB, keyboard and mouse, HS SAS/SATA 1 x 835W power

Up to 8 hot-swappable SAS or SATA HDDs or up to 12 hot-swappable SFF SAS or SATA HDDs to support large capacity

ibm.com/systems/simplifyit
1 866-872-3902 (mention 6N8AH15A)

IBM, the IBM logo, IBM Express Advantage, System x and System Storage are trademarks of International Business Machines Corporation in the United States and/or other countries. For a complete list of IBM trademarks, see www.ibm.com/legal/copytrade.shtml. Intel and Xeon are registered trademarks of Intel Corporation. All other products may be trademarks or registered trademarks of their respective companies. All prices and savings estimates are based upon IBM's estimated retail selling prices as of 8/20/08. Prices and actual savings may vary according to configuration. Resellers set their own prices, so reseller prices and actual savings to end users may vary. Products are subject to availability. This document was developed for offerings in the United States. IBM may not offer the products, features, or services discussed in this document in other countries. Prices are subject to change without notice. Starting price may not include a hard drive, operating system, or other features. Contact your IBM representative or IBM Business Partner for the most current pricing in your geographic area. © 2008 IBM Corporation. All rights reserved.

intel Xeon inside
Powerful. Efficient.

Swift Translation

Videoconferencing technology enables on-demand, round-the-clock interpreting services for the hearing-impaired.

By Mary K. Pratt

AT A GLANCE

Deaf Link Inc.

SAN ANTONIO

Uses videoconferencing technology to provide American Sign Language interpreting services between its client organizations and the customers and patients they serve. The company employs 62 people, including 42 interpreters.

PROJECT TEAM: Deaf Link President and CEO Kay Chiodo, Chief Operating Officer Michela Steele, Technology Director Tyler Chiodo, Vice President of Business Development Dan Heller and national liaison Mike Houston, who is the only deaf member of the leadership team at Deaf Link. The IT group today consists of Chiodo and three other staffers.

PROJECT RETURN: Videoconferencing allows Deaf Link's client organizations, which include health care providers, banks, government agencies and social services providers, to immediately access interpreters based at Deaf Link's communications center. Thanks to Deaf Link's services, the client organizations have less of a need for more-costly on-site interpreters.

KAY CHIODO lays out a frightening scenario: A child is missing in an airport, and his mother, who is deaf, is frantically looking for him.

When the mother rushes to an airline employee for help, there's a communication breakdown. The employee doesn't know sign language, so the anxious mother writes a cryptic message that reads like it's been translated from a foreign language, something like "boy, 6, no see."

Precious minutes slip away.

For Chiodo, that's unacceptable.

"It's a real challenge getting interpreters from one place to another in a timely manner, and sometimes a person's life depends on it," she says.

So Chiodo, CEO of Deaf Link Inc., turned to technology to address that problem. Deaf Link uses videoconferencing technology and a call center environment to instantly make American Sign Language (ASL) interpreters available to people who need help communicating. The company was a 2008 *Computerworld* Honors winner in the category of business and related services.

ANSWERING A NEED

Through this service, deaf and hard-of-hearing individuals can communicate with employees at organizations of all types, without delays or scheduling requirements.

"Can you imagine going to the hospital with your child who is sick and not knowing what the doctor says, or not being able to tell the doctor your child is allergic to penicillin?" Chiodo asks. "Those kinds of things can be changed."

Olivia Ramirez, a patient advocate at Christus Santa Rosa Health Care, also in San Antonio, agrees. "Deaf Link has really saved a lot of time, especially for our doctors in the emergency room," she says. Ramirez adds that getting ASL interpreters to a site can sometimes take up to an hour.

Christus Santa Rosa Health Care also has seen its costs drop dramatically with Deaf Link. Now the hospital doesn't have to pay translators for the time they spend traveling to the site or the time they spend waiting to meet with patients and doctors. The average monthly cost for Deaf Link is about $1,400; before it started using the service, the hospital was spending about $3,200 for in-person ASL translators.

The organization initially borrowed Deaf Link's equipment to use in a pilot test that began in late 2007. It felt the test was a success, and Ramirez says the hospital is now spending about $17,000 to purchase and install two videoconferencing stations of its own.

There's a great need for such services. Some 30 million people in the U.S. are deaf or hard of hearing, and many of them use ASL to communicate. People who can hear are aware of sign language, but many don't realize that ASL is considered a foreign language; it has no roots in English and uses no

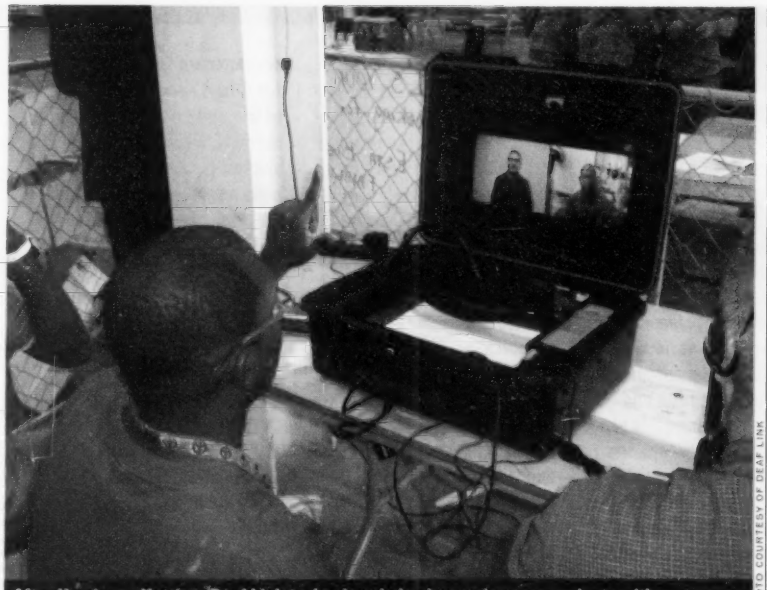


PHOTO COURTESY OF DEAF LINK

After Hurricane Katrina, Deaf Link technology helped agencies communicate with evacuees.

English syntax. According to Gallaudet University, the majority of deaf individuals have a second- to third-grade comprehension of English. That's why the hypothetical mother in the airport would write something like "boy, 6, no see" — it's what she would sign.

Chiodo learned to sign as a child, taught by deaf children who lived in a group home near where she grew up in Arkansas. She put her ASL skills to professional use later in life, when in 1989 she worked as a job placement specialist at the Southwest Center for the Hearing Impaired in San Antonio.

Soon after that, Chiodo started Vital Signs Inc., which provided in-person, on-site ASL translation services for businesses, health care providers and other organizations. Demand for her services received a boost with the 1990 passage of the federal Americans With Disabilities Act, which mandates equal access for individuals with disabilities.

But the growing demand for ASL interpreters revealed a weakness in Chiodo's business model: Interpreters often spent more time traveling to appointments than they spent translating.

Inspiration struck in the late 1990s, when she saw a demonstration for a relay service in which deaf callers used the Internet to reach ASL interpreters who then placed phone calls on their behalf.

"I saw that and said, 'We're going to do this. It will be like a live interpreter standing in the room, except we'll be in a call center,' " Chiodo recalls.

To start her company, she invested roughly $1.5 million in videoconferencing equipment, broadband Internet service and an 8,500-square-foot communications center that includes soundproof cubicles.

The idea seems straightforward, but Chiodo faced obstacles — technical, financial and cultural — from the start.

Videoconferencing equipment at that time was prohibitively expensive, and many office locations didn't have access to high-speed bandwidth, says Deaf Link COO Michela Steele. Because slightly different hand motions can mean different words in ASL, it was crucial to have broadband connections to support superior video performance.

"On almost every front, we fought to get the software and Internet lines we needed," Steele says. She recalls ruling out potential office space because it couldn't get DSL service. "At that time, getting broadband was a nightmare," she says.

But then came the tech boom. The cost of videoconferencing equipment came down and the quality went up. Cable and DSL expanded their reaches. The timing was right, Steele says.

Chiodo and Steele tested equipment from numerous vendors and initially went with Miami-based Aethra Inc., partly because, with Aethra's equipment, Deaf Link could use its own server and didn't have to pay a monthly hosting fee.

Other challenges remained, however. Deaf Link's business plan required a call-center-type environment, where organizations could access ASL interpreters and be billed only for the time they used. So the fledgling company needed applications that would route and queue calls as well as track the minutes used.

Steele says the company also needed firewall transversal units and security and encryption applications, as mandated by the privacy requirements set by HIPAA, the federal Health Insurance Portability and Accountability Act of 1996.

"There were no applications that could do everything we wanted," says Tyler Chiodo, Deaf Link's technology director (and Kay Chiodo's son). He says he customized applications, putting together multiple pieces from different sources over "many hours and frustrating nights" to develop a system to handle the job.

CHALLENGES ON BOTH SIDES

Meanwhile, client companies had similar struggles, Steele says. Many didn't have the in-house technical expertise to install and support videoconferencing equipment. But time improved that situation; as videoconferencing grew more popular, more companies hired employees with expertise in that area.

Abner Germanow, an analyst at research firm IDC, says Deaf Link is "on the leading edge of thinking about this notion of how to get experts to interact with a lot more people."

Germanow says organizations are just beginning to explore how they can use videoconferencing to solve business problems, rather than just using it to hold meetings for people in different locations. He cites a collaborative of California hospitals that uses videoconferencing for translation services as an example of what's ahead.

"Those examples of new business models based on videoconferencing are very much in their infancy today," he adds.

Several recent trends have made the timing right for these types of uses to take off, Germanow says. The technology has improved, prices have come

Getting Their Hands Dirty

When Kay Chiodo and Michela Steele decided to use videoconferencing to deliver American Sign Language interpreting services, the pair faced the daunting, yet expected, task of finding the right technology to do the job.

But they were able to handle that challenge, and they did so in an unexpected way: They did it themselves. No expert IT workers, no consultants.

"When the boxes came, I opened them, plugged it in, did the troubleshooting, took it home. Every one of us has had stuff in our house, in our offices, in our hands to figure it out," says Steele, who is a certified ASL interpreter. "We know our business, and we love what we do, so why would we have let others play with our toys?"

Technology Director Tyler Chiodo says Deaf Link has tested dozens of pieces of equipment from various vendors since the company's inception. He says he and his colleagues continue this practice, trying out new options and products before buying and implementing them.

"Hands-on experience is the best way to go," he adds.

Deaf Link's leaders concur that this trial-and-error approach has allowed them to implement only the technology that best suits their needs, although Tyler Chiodo also acknowledges that the system works because Deaf Link is a small operation.

Bigger IT shops can learn from Deaf Link, though. Although users shouldn't run the show, many IT departments could do a better job of involving them in the process of developing and selecting the technologies they will use. Here are some ways to reach that balance:

■ Embed IT workers in the business units. "They're more into the day-to-day operational support. They have a much better appreciation of what the business requirements are, and they also give [the business users] a better insight into all the things that IT has to address," says Zahid Habib, managing director of energy/technology in PricewaterhouseCoopers' advisory practice.

■ Regularly test ideas with a representative group of users, even if doing so just involves a series of steps written on Post-it notes, says Rosemary Hossenlopp, founder of Project Management Perspectives LLC, a Mountain View, Calif.-based consultancy that provides software development services.

■ Adopt core elements of the agile development method, where you gather shallow but broad business requirements to start and then dive into deeper requirements as you deliver iterations, says Mary Gerush, a project management professional and an analyst at Forrester Research Inc.

■ Pilot-test systems with a subset of users to see if the products meet their needs and to determine what, if any, additional functions or customizations are necessary, Habib says.

■ Set up a steering committee that includes the leader of the business unit that will ultimately own the product, plus IT workers and project managers. The group should weigh user demands and requirements against what's fiscally and technologically feasible, according to Hossenlopp.

– MARY K. PRATT

down, and consumers have become increasingly comfortable with it.

"Now you have people thinking about solving business problems that can't be solved otherwise," he says. "We're right at the cusp of this. There are a lot of people who are thinking about it, and if they're not thinking about it, they should be."

Since entering what's known as the video remote interpreting (VRI) market, Chiodo has seen an increase in the types of organizations requesting services. For example, banks, which are more likely to need translation services on the spot, have signed on as clients. Government agencies turned to Deaf Link to communicate with deaf evacuees from Louisiana following Hurricane Katrina. And in 2007, San Antonio International Airport became the first airport in the nation to offer VRI services for communicating with deaf people.

Today, Deaf Link has more than 80 clients — a mix of health care providers, nonprofit organizations, government agencies and businesses from multiple states. These clients can reach ASL interpreters around the clock, with no additional fees for holidays, weekends or off-hours, Chiodo says.

Deaf Link now uses equipment from Norway-based Tandberg ASA. Deaf Link officials say they picked Tandberg because of its user-friendly interface, firewall transversal offerings and support services. (Deaf Link clients can use whatever videoconferencing equipment they choose.)

In addition to its VRI services, Deaf Link has prerecorded interpreting offerings. It also developed a proprietary Internet-based program called the Accessible Hazard Alert System to transmit emergency announcements from the Texas Department of Public Safety to help ensure that people with hearing disabilities receive such warnings. The alerts can be sent in various formats, such as videos of messages in ASL to be broadcast on TV or text-based notes to individual Braille-capable devices. AHAS was first used for Hurricane Dolly, which hit Texas on Aug. 22, 2008; it was the first emergency in which a state could deliver the same information to everyone at the same time.

Future innovations are in the works. Tyler Chiodo says Deaf Link is looking at ways to provide its services on mobile devices such as tablet PCs. And Kay Chiodo says the company has plans for more growth.

"We were providing access before, but technology has advanced it even further," she says. And that's important, she adds, "because I just don't believe that doors should be closed. Period." ■

Pratt *is a* Computerworld *contributing writer in Waltham, Mass. Contact her at marykpratt@verizon.net.*

The Covert PMO

How to produce great projects when you're outnumbered, outgunned and weary to the bone. **By Thomas Cutting**

SETH JOEL

YOUR POSITION has been overrun. Trapped behind enemy lines with hostiles lying in wait to expose you, your only option is to go to ground, become part of the crowd. Even allies from previous missions are attempting to thwart your every move. Hidden in the masses, you press forward, attempting to finish the mission. Is it time to surrender to the chaos or struggle on, collecting your paycheck until that perfect job offer appears? Or do you persevere?

You will not surrender! Yes, you may be outnumbered, outgunned and weary to the bone, but you know there is a better way to manage your project, your sponsor and the business. Begin an underground movement to develop a covert project management office.

The purpose of a PMO is to bring people, processes and technology together to consistently deliver quality results. But what can you do when the people you are trying to protect (management, business or customer) think PMO stands for "painful meaningless overhead"? It's time to go STEALTH.

Set your vision. When things are darkest, night-vision goggles can allow you to focus, but without a target, they're useless. What are the pain points that must be destroyed? Are projects dragging on indefinitely and missing their mark? Do requirements show up like land mines during user-acceptance testing? Reconnoiter the business, discover users' complaints, and set your vision to eliminate them. Liberate the business, and you will have strong allies.

Test the environment. Search for hidden allies who can help your cause. If you are under fire, chances are other project managers are engaged in similar battles. Management may be ready for a new approach. Begin recruiting others to support your vision. Let them help sharpen it.

Establish your objectives and plan. Sketch out your attack strategy. How are you going to accomplish your vision? What steps will be needed? Lay out an aerial view of the endgame. Does it have processes to manage change, issues and risk? Do you see templates for status, metrics to measure, a communication plan? Remember, this is a covert operation. Attacking too many places at once may give away your position. Give the plan time.

Agree on standards. Identify a consistent approach for doing business. Issue management is an easy target to start with. Define a recording and tracking method. Risks might be next. A proactive risk management approach can eliminate future issues.

12 SIGNS YOU NEED A COVERT PMO

1. You're leading. But no one is following.
2. Meetings are chaotic and unproductive.
3. Scope is creeping.
4. Objectives are not being met.
5. Your team is pinned down and taking casualties.
6. Missions are aborted.
7. Accountability is assigned, not grasped.
8. Reason has been overrun.
9. Everything changes. Every time.
10. The business views you as the enemy.
11. You are frustrated.
12. Confusion reigns.

These targets should not be difficult to approach. No need to publicly identify them. Snipers don't advertise their operations.

Leave it flexible. Be consistent without becoming rigid. Forcing a mission when resistance is high only gets people killed. If one area prefers e-mail status reports over Word documents, make sure both methods cover the same key topics. Don't fight an immovable force, and never blow up a bridge you may need to cross again.

Train project participants. But don't hold a class or give a lecture; be subtle. Make suggestions. Ask leading questions. Plant ideas. Lead your team, your manager and the business to do projects the way you want them to. Act consistently and perform professionally, making them expect the best of you. Set reasonable and attainable expectations of them, raising their expectations of themselves. Start to win their hearts and minds.

Help others embrace the vision. Success is the best propaganda. You don't need to trumpet your achievements; people will start noticing. Create and use metrics to show improvements. Share your successes with others, and show how your approach can work for them, too. Share the vision, and get them involved in it.

In the end, there may be no hero's medals. The chaos may only be pushed back for a time. But here and now, you can make a difference as a secret agent of change. ■

Cutting *is a certified Project Management Professional and owner of Cutting's Edge. Contact him at Thomas@CuttingsEdge.com.*

Budget Ax Falls on Disaster Recovery

Execs figure cutting DR for **new projects** will save half their cost. But to a security manager, it feels like **living on the edge.**

Trouble Ticket

AT ISSUE: Having no capital funding for 2009 wasn't the worst news from budget meetings.

ACTION PLAN: With disaster recovery not included in new-project plans, there's nothing to do but hope for the best.

I JUST CAME BACK from an all-day budgetary bloodbath. Not unexpectedly, my capital budget for 2009 is basically zero.

What I had not expected was the gutting of the disaster recovery budget. Until now, the cost of disaster recovery has always been included in any new project or implementation. Anytime we have built a new production service that is mission-critical to the business, we have also built a duplicate in our secondary data center. No more. Now our executive management team wants to stop funding the extra cost of DR systems.

In this day and age, I can't imagine any large company relying on a single point of failure for business-critical services. But that's exactly what our executives want to do. In their minds, duplicating our systems in a data center that may never get used essentially doubles the cost of any implementation.

So, as they reviewed our expenditures in search of ways to save significant money, they hit on cutting out DR for new installations, believing that this will cut the costs of new implementations in half.

I believe that DR is an investment in keeping the company alive in the event of a severe outage. It's an insurance policy, and like any other insurance, you pay upfront so that you don't suffer severe losses later. The ability to switch operations to an alternate data center is indispensable at any company where critical system outages can cost millions of dollars an hour. Hurricanes, earthquakes and terrorist attacks are just some of the disasters that can occur with little or no warning. They're all facts of life, though we wish they weren't, and their consequences can be devastating — for businesses as well as people. Many companies have even been forced to go out of business in the wake of a disaster.

■ I can't imagine any large company relying on a single point of failure for business-critical services. But that's exactly what our executive management team wants to do to cut costs.

At my company, the battle over DR was fought and won a long time ago, so it's disheartening that the concept is once again being questioned. The executives are asking what value we get from servers that don't do anything unless something really bad happens. The way they figure it, we can deploy twice as many services without DR as we can with DR, so why not spend what little budget we have on rolling out new applications without the added cost — and protection — of backup servers?

HARD CHOICES

I say we're better off rolling out half the services and making them robust. But right now, I'm outvoted. In this dismal economy, we have to make hard choices, but this feels like taking two steps backward. If we stop building DR systems, when are we going to start again? And when — if ever — are we going to go back and build DR systems for the applications we roll out in 2009?

It looks like I'm not going to be able to get a budget for any new security services, either. About the best I can do is replace existing security services with cheaper options. In a way, that's a good thing, because it gives me the opportunity to improve some areas of our security infrastructure that aren't giving us the results I'm looking for. But not adding anything new will mean our security posture is going to stall for now. We're going to have to tread water for a while and do the best with what we have.

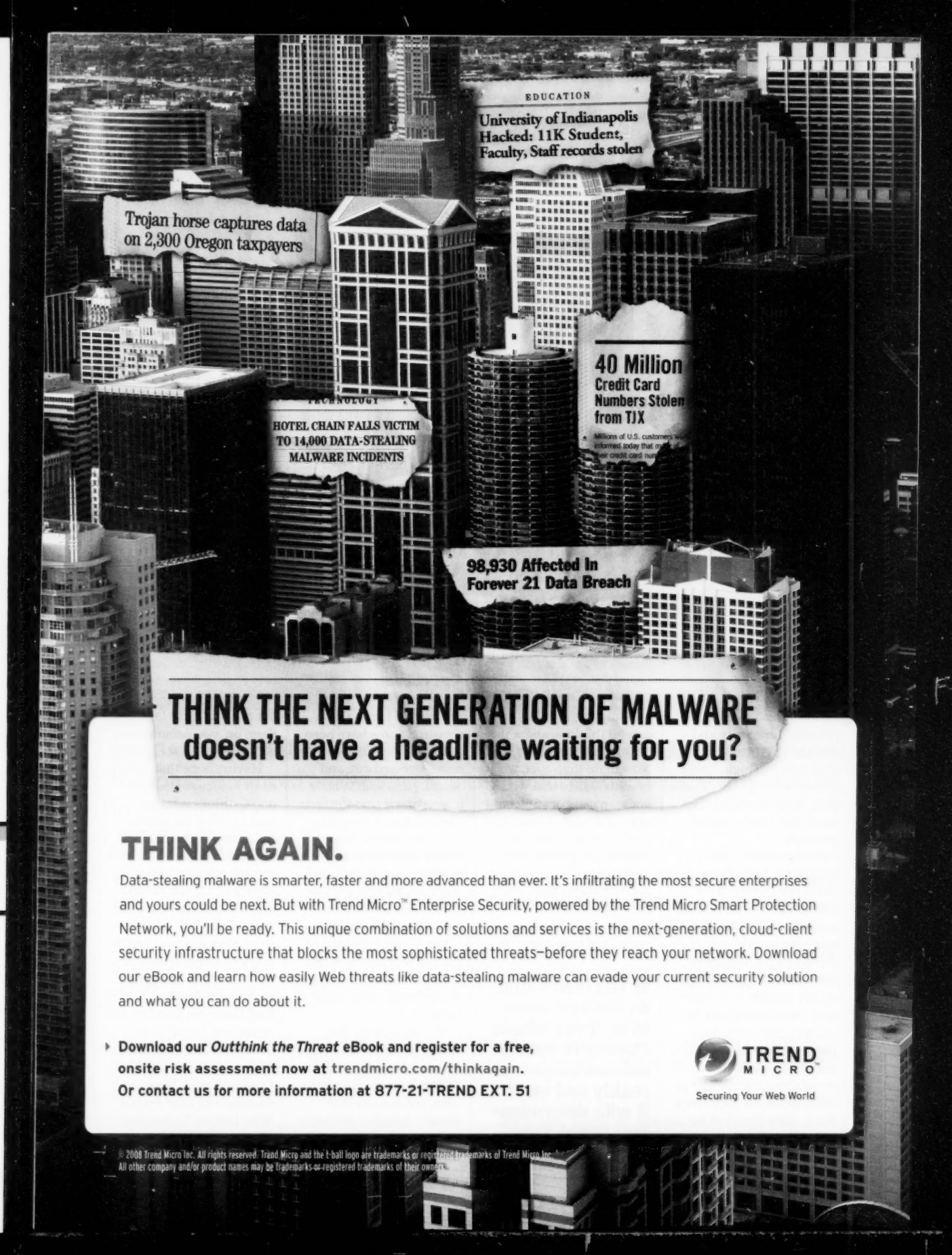
Things could be worse, I'm sure, but they could be better, too. At least we're going to be able to keep what we have for now, except for disaster recovery. I know many people are in worse situations, but that doesn't really make me feel any better about this. This year is shaping up to be tough. I hope things get better for all of us soon. ■

This week's journal is written by a real security manager, ***"J.F. Rice,"*** *whose name and employer have been disguised for obvious reasons. Contact him at jf.rice@engineer.com.*

COMPUTERWORLD.COM

JOIN IN

To join in the discussions about security, go to **computerworld.com/blogs/security.**


EDUCATION
University of Indianapolis Hacked: 11K Student, Faculty, Staff records stolen
Trojan horse captures data on 2,300 Oregon taxpayers
40 Million
Credit Card Numbers Stolen from TJX
HOTEL CHAIN FALLS VICTIM TO 14,000 DATA-STEALING MALWARE INCIDENTS
98,930 Affected In Forever 21 Data Breach
THINK THE NEXT GENERATION OF MALWARE
doesn't have a headline waiting for you?
THINK AGAIN.
Data-stealing malware is smarter, faster and more advanced than ever. It's infiltrating the most secure enterprises and yours could be next. But with Trend Micro™ Enterprise Security, powered by the Trend Micro Smart Protection Network, you'll be ready. This unique combination of solutions and services is the next-generation, cloud-client security infrastructure that blocks the most sophisticated threats–before they reach your network. Download our eBook and learn how easily Web threats like data-stealing malware can evade your current security solution and what you can do about it.
Download our *Outthink the Threat* eBook and register for a free, onsite risk assessment now at trendmicro.com/thinkagain.
Or contact us for more information at 877-21-TREND EXT. 51
TREND MICRO
Securing Your Web World
© 2008 Trend Micro Inc. All rights reserved. Trend Micro and the t-ball logo are trademarks or registered trademarks of Trend Micro Inc.
All other company and/or product names may be trademarks or registered trademarks of their owners.

OPINION

Paul Glen

Panic – and How to Prevent It

THE YEAR AHEAD isn't shaping up to be a good one for IT, to say the least. As we settle into the recession here in the U.S., budgets are increasingly going to reflect the worsening business conditions. That means a year or more of tough times for all of us. The sad reality is that more of us will be looking for work in the next 12 months.

And for those with jobs, it's not going to be so pleasant either. When times get tough, people feel stressed out, frazzled and nervous. That's not unreasonable. When people are faced with a combination of resource limits, personal insecurity and demands for productivity, emotions run high. There are no easy jobs left. Those of us lucky enough to be employed have stressful jobs now.

For managers, this represents a significant challenge. Stressed-out knowledge workers do not perform at their best. Just when we need people to focus and produce, they are distracted by the ugly reality outside. You really can't expect people who are worried about their personal financial security to completely shut out those thoughts in order to concentrate on their work. But knowledge work requires exactly that sort of composure.

To a degree, distraction is unavoidable. But as managers, we need to do our best to help people stay on track and do that which is completely unnatural: keep their eyes off their fears and on their work.

Doing this requires careful thinking about the emotional state of the staff. Now more than ever, we need to realize that we are not managers of stuff, but of people who do stuff. We don't manage tasks; we manage the people who do those tasks. And people have emotions that affect their performance.

The most important emotional state to pay attention to right now is panic. We have to help keep stressed-out staffers from becoming a panicked mob. Stress may be unavoidable, but panic is not.

■ The teams that do the best seem to be those whose managers openly acknowledge reality and meet it with determination rather than trepidation.

As a consultant, I've seen lots of organizations and project teams under pressure. Some have been composed and focused; some, stressed out; and others, panicked. What's interesting is that the facts surrounding their work are often similar. They are all under time and resource constraints, and many are facing the same personal insecurity. But they respond differently.

I've noticed that one of the key differences is in how the managers of these groups respond to those facts.

Managers who deny reality generally don't fare too well. Telling people, "There's no problem here; what are you worried about?" usually convinces the staff that you are either an idiot or a liar. Neither is a useful image.

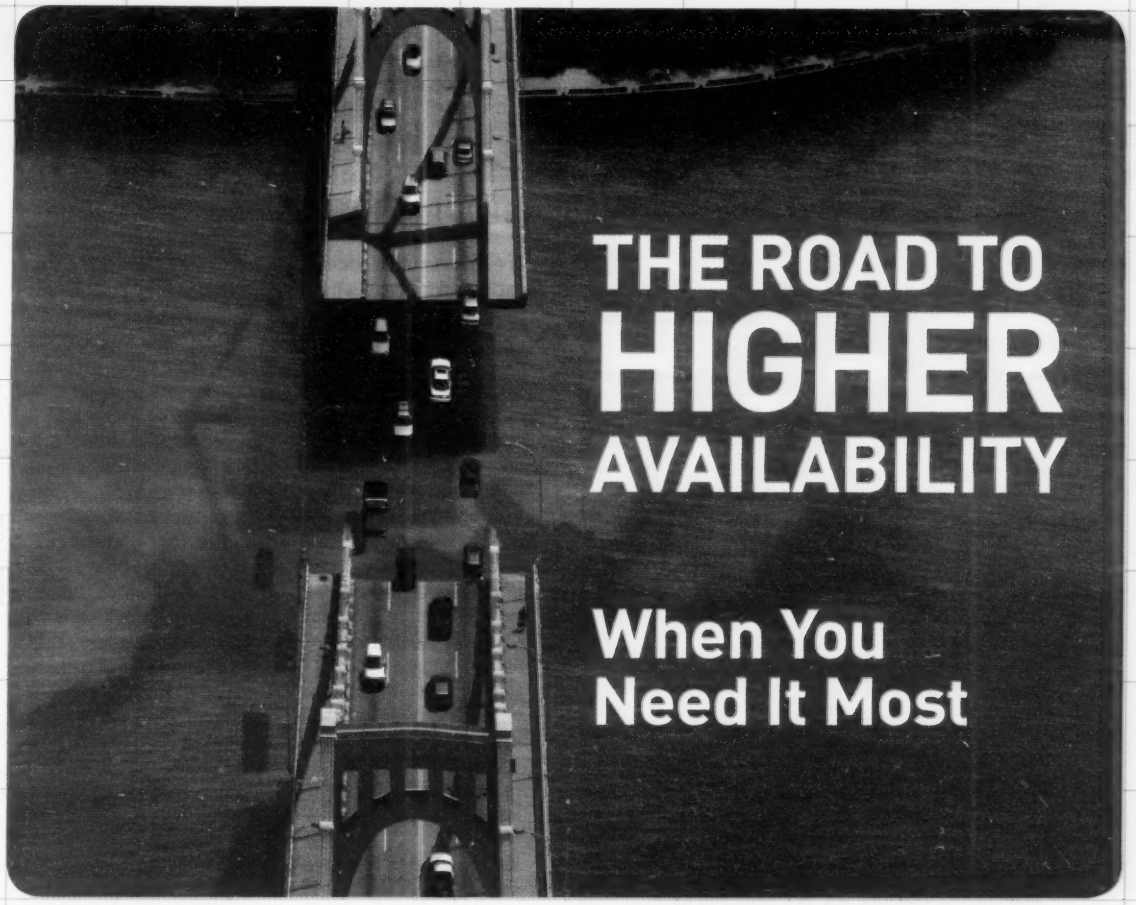
Managers who try to tell their people what they should or shouldn't feel about reality generally don't fare well either. Telling people "You shouldn't worry about this" usually gets them worrying.

Managers who panic themselves are the most likely to induce panic in their people.

The teams that do the best seem to be those whose managers openly acknowledge reality and meet it with determination rather than trepidation. And how you respond is more important than anything you say. When you establish a common frame for reality and convince everyone that you see the same challenges they do but are willing to take them on, you demonstrate the best response.

Having done that, you need to focus attention on the things you can control — on the activities that will give the best chance for success. If those around you see the possibility of a better future and feel that they have the power to be part of creating it, they are most likely going to respond well, no matter how challenging reality may be. ■

Paul Glen *is the founder of the GeekLeaders.com Web community and author of the award-winning book* Leading Geeks: How to Manage and Lead People Who Deliver Technology *(Jossey-Bass, 2003). Contact him at info@paulglen.com.*



SunGard Availability Services help your business move forward with the most advanced and widest choice of information availability options in the industry

From virtualization to hot sites to replication and vaulting—SunGard Availability Services does it all. And it's all we do. That kind of focus helps ensure high availability of data, applications and systems and fits your needs and budget precisely.

When we partner with you, you worry less about the road ahead. Here's why: a track record of 100% successful recoveries; over 60 facilities with redundant power connected to SunGard's secure global network; and more than 20,000 end-user positions in facilities across North America and Europe. SunGard Availability Services—the information availability solution for businesses that must run non-stop. **Keep moving, call 1-800-468-7483 or visit www.availability.sungard.com.**

SUNGARD® Availability Services | Keeping **People** and **Information** *Connected.®*

Career Watch

IT WORKERS: Last-Born Pisces Who Love Their Jobs?

OH, THE WAYS WE TRY to categorize society and explain career choices. Besides those old standby personality assessments Myers-Briggs and Keirsey Temperament Theory, there's the Dewey Color System, where you choose color preferences in a series of options and find out just what sort of person you are and the type of work you're best suited to. (Go ahead and give it a try online; I found out that I am one of two possible types, which seemed diametrically opposed to each other.)

Now come the results of a CareerBuilder.com online survey of 8,785 people that looked at "predictors" such as astrological sign and birth order.

What can you learn from this highly scientific study?

- The last born is more likely than his siblings to go into IT.
- Those born under Pisces, Aries, Sagittarius and Capricorn are more likely than others to take up IT as a profession.
- Scorpio, Leo, Taurus and Cancer are the astrological signs most likely to earn six figures. Those born under Capricorn and Aquarius are most likely to earn under $35,000.
- Pisces, Sagittarius and Capricorn (remember, those all correlate highly to employment in IT) are the signs most closely associated with job satisfaction.

Aren't you glad you know?

– JAMIE ECKLE

PAGE COMPILED BY JAMIE ECKLE.

Priscilla Arling

The **assistant professor of MIS** in the **College of Business Administration** at Butler University discusses her study on **telework and productivity.**

Is telecommuting necessarily bad for productivity? I'd like to broaden the perspective of the question a bit. Today, many organizations have team members who are not physically located together and where communication technology is used to accomplish tasks and interact. This way of working is called "distributed work." In addition, measures of success have changed from productivity to performance. Performance includes aspects of productivity, as well as evaluation of knowledge-sharing and teamwork. So the answer to the question, "Is distributed work necessarily bad for performance?" is an unequivocal no, as evidenced by the proliferation of distributed teams across the globe.

How can teams that aren't collocated collaborate effectively? In my research on distributed work, I was curious about the differences in face-to-face and electronic communication. I knew from 15 years of working in teams that individuals had two separate networks of communication: a face-to-face and an electronic network. I found that it was the characteristics of electronic networks that were related to performance. Face-to-face networks are important, but in distributed work, it is electronic networks that differentiate high and low performers. High performers had large, closely knit electronic networks – that is, contacts were in frequent communication with each other.

Is technology key to making it work? Technology is just a tool, and the success you achieve depends on knowing when to use it and when not to use it. Communicating electronically with many team members was not always beneficial.

For instance, knowledge sharing was lower when an individual's electronic contacts were in many different physical locations. However, this negative effect was less in larger teams. In those teams, processes that helped team members understand each other were more likely to be in place. Information about team members' contexts and the work they were performing was regularly shared, so diversity in locations was not as detrimental.

TIPS

Some advice from Priscilla Arling for better communication:

- **Develop closely knit electronic networks.**
- **Collocate more team members in fewer physical locations.**
- **Institute processes and routines that help team members understand the differences in context across physical locations.**

Does that mean IT has a limited role in making telework situations more productive? A key takeaway from my work is that increasing performance in a distributed team is not as simple as increasing electronic communication or even getting team members together more often for face-to-face contact. The focus needs to be on increasing understanding between team members.

Co-Branded
EMAIL
BLASTS

Reach your target audience of professional IT job seekers with Computerworld's Co-Branded Email Blasts. This unique program allows you to choose your criteria of 100% opt-in subscribers by geography, company size, job title and industry.

Call Dawn Cora at
800-762-2977 for details!

COMPUTERWORLD

PROGRAMMER ANALYST w/2 yrs exp to dsgn, dvlp & implmt solutions using Oracle Dvlpr 2000, Oracle Dsgnr, SQL* Loader, Unix Shell Scripting, AWK Prgmg, Oracle Warehouse Builder, Oracle Workflow Builder & ERWin. Implmt & customize Oracle Portal, which incl Oracle Forms & Reports on Unix OS. Provide tech support. Mail res to: MGL Americas Inc., 220 Old New Brunswick Rd, Ste #101, Piscataway, NJ 08854. Job Loc: Piscataway, NJ or in any unanticipated locs in the USA.

COMPUTERWORLD

Law Firms
IT Consultants
Staffing
Agencies

Are you frequently placing legal or immigration advertisements?

Let us help you put together a cost effective program that will make this time-consuming task a little easier.

Contact us at:
800.762.2977
IT|careers

Meridian Technologies looks for IT professionals (Analyst, DBA, S/W engineers) using Oracle, SAP, SQL, Java, Web applications, Unix. Must have MS/BS or equivalent with some IT experience. Travel required for some positions. Please contact jobs@meridiantech.net. EOE.

CIENA Healthcare seeks Network Administrator. Install, configure Windows 2003/2000 Servers, involve in TCP/IP Ethernet Networking, DHCP and static IP addressing & Wireless Network configuration. Send resume to 4000 Town Center, Ste. 380, Southfield, MI 48075.

Comp Consults seeks software engineer, Analysts, DBA, IT Manager to design & develop programs using Oracle, Unix, C/C++, VB, Java, J2EE, EJB. Require MS or BS with 1-5yr IT exp. Jobsite various. Please send resumes to immg@compconsults.com.

Livermore Software Technology Corp (LSTC) seeks software developers in area of Fortran, multimaterial Eulerian fluids. Min qualification: MS/BS with 1-5yr exp. Travel maybe required. Send resumes to 7374 Las Positas Road Livermore, CA 94550. No calls.

Software Project Manager w/ Masters in Comp Sci or Engg & 1 yr exp. Plan, direct & coord activities of designated project. Dsgn, dvlp & create s/ware applics using Apache, Visual Basic, FTP, SMTP. Gather systms reqmts, monitor & track progress. Dvlp, maintain & track comprehensive project plans using MS Project. Use Visual Source Safe, TCP/IP, MS Visual Studio, Oracle JDeveloper, HTML & DHTML. Supv 2 Consultants. 1 yr exp as S/ware Engr acceptable. 1 yr exp prior to completion of Masters acceptable. Mail res to: Algomod Technologies Corp., 116 John St., Ste 1406, NY, NY 10038. Job Loc: NYC

QA Testing Analyst to test enterprise-level applications in Unix environment, utilizing SQL, test automation tools & test management tools. Multiple openings. Requires Bachelors or equiv-level degree in Comp Sci, Eng, Math or closely related & 3 yrs exp w/ SQL in Unix environment. Resume to: R. Heinlein, Ferguson Consulting, Inc., 1350 Timberlake Manor Pkwy, Ste. 450, St. Louis, MO 63017. EOE

IT Professionals, Project and Finance Managers Patni Americas, Inc., an established and expanding IT consulting company with headquarters in Cambridge, MA is searching for qualified IT Professionals (i.e., Software Consultants, Software Engineers, Programmer/Analysts, Systems Analysts, Database Analysts, QC Engineers); Information Systems and Project Managers; Program Managers; and Account/Sales Managers for its growing team. Technical positions require a Bachelor's degree in Computer Science, Engineering or a related field and/or relevant industry experience. For our Information Systems and Project/Program Manager positions we prefer a MS degree in related fields such as Computer Science or Engineering and relevant industry experience. We will consider applicants with a relevant Bachelor's degree and significant industry experience for these positions. Our Account/Sales Manager, Engineer and Business Development Officer positions involve developing and managing business development intiatives, as well as existing accounts for the company. Qualified applicants will have a technical and/or business/marketing degree (Master's preferred) and relevant industry experience. We will consider candidates with a relevant Bachelor's degree and/or relevant sales/BDM experience. We also seek Finance and Investor Relations Managers which require BS or equivalent in Accounting, Business, Finance or a related field and relevant IT industry experience. Some positions may require MS degree. Positions may require relocation to various client sites throughout the United States. Qualified applicants submit resumes to HR Department (Attn: Mithilesh Sharma), Patni Americas, Inc., One Broadway, 15th Floor, Cambridge, MA 02142.

Software Engineer positions. Competitive salary. 40 hr/wk. Responsible for support and programming of current application Acom3 in Java. Additional responsibilities include application development using leading edge technology, business analysis and customization of the Acom3 product to support greater efficiency within our customers work flow. Environment used Java and XML. Require Master's degree in Computer Science, Electrical Engineering, Computer Engineering or Management Information Systems and 1 year of programming experience in JAVA and XML environment or will accept a Bachelor's degree in Computer Science, Electrical Engineering, Computer Engineering or Management Information Systems and five years of programming experience in JAVA and XML environment. Send resumes to Actek, Inc., 2120 Data Drive, Birmingham AL 35244 or e-mail to personnel@acteksoft.com . EOE.

SharkTank

TRUE TALES OF IT LIFE AS TOLD TO SHARKY

Got a Problem? Turn to IT

University IT department rolls out a new Web portal to simplify access to the school's various information systems, reports a pilot fish working on the project. "We marketed the heck out of the Web portal, purchasing balloons, mouse pads and custom M&Ms," fish says. "To further foster adoption, we put up a 'suggestion box' on the log-in page, asking for improvements users would like to see on the new portal. One of our female students responded with the following: *I think hooks on the inside of the bathroom stall doors would be beneficial to students. At least for the women.*"

Just One More Thing

It's time for this IT pilot fish's annual review. "I get called into the boss's office, and we go over the review," says fish. "Our review is based on a 1-to-5 scale, where 3 is adequate, 1 is above and beyond the call of duty, and 5 means you stink. I'm getting nothing but 1s and 2s, and I'm feeling pretty good. Boss asks, 'Any questions?' I say, 'Nope.' Boss says, 'I have to lay you off.' I do a trout imitation."

Oops!

This IT pilot fish and his cohorts have worked out a system for identifying laid-off co-workers. And it's reliable – mostly. "We generally found out that a colleague had been fired when we tried to call the person and the office phone number no longer worked," fish says. "Things got a bit tense one day when the phone system went on the fritz."

Automation, Redefined

While chatting with the manager of a department that prepares daily operation reports, this pilot fish comments, "With all your new software, I would imagine that all of your reports are automated now." Replies manager, "Oh, yes, we don't do anything manually anymore. We copy and paste everything now!"

Happy Now?

This pilot fish writes a program to check activity on a particular server, then starts it up and leaves it running. Results? "The software to monitor the server for errors had stopped working two months before," says fish. "The software to monitor the server for intruders had stopped working four months before, and nobody had noticed. The server had several rogue sessions taking up resources and slowing it down. The e-mail system had a stuck message in it. The network had an intermittent fault. The only thing working properly was my program. A number of teams had to sort out the errors and explain why they were not picked up. Let's just say I am not the most popular person with them at the moment."

■ *Get popular with Sharky. Send your true tale of IT life to sharky@computerworld.com. You'll snag a snazzy Shark shirt if I use it.*

COMPUTERWORLD.COM

NEED TO VENT YOUR SPLEEN? Toss some chum into the roiling waters of Shark Bait. It's therapeutic!
sharkbait.computerworld.com

CHECK OUT Sharky's blog, browse the Sharkives and sign up for Shark Tank home delivery at **computerworld.com/sharky.**

■ COMPANIES IN THIS ISSUE

Page number refers to page on which story begins. Company names can also be searched at computerworld.com

Advanced Micro Devices Inc. 6
Aethra Inc. 25
Ameriprise Financial Inc. 2
Apple Inc. 12, 19, 22
AT&T Inc. 6, 12
Atempo Inc. 22
Bloomberg LP 2
Borland Software Corp. 6
Business Software Alliance 25
Butler University 32
Cable News Network LP 8
Capgemini 6
CareerBuilder LLC 32
Centrify Corp. 22
Children's Hospital Oakland Research Institute 23
Christus Santa Rosa Health Care 24
Citigroup Inc. 25
Clearwire Corp. 12
CommuniGate Systems 23
Cox Communications Inc. 12
Cutting's Edge 27
Deaf Link Inc. 24
Dell Inc. 5
Electronic Data Systems Corp. 6
Electronic Frontier Foundation 6
EMC Corp. 5, 23
Enterprise Desktop Alliance 22
Everest Group 5
Federal Communications Commission 10
First Data Corp. 2
Foote Partners LLC 25
Ford Motor Co. 20
Forrester Research Inc. 5, 22, 26
Fox News Network LLC 8, 36
Gallaudet University 24
Gartner Inc. 12, 20
Genentech Inc. 22
Google Inc. 10, 12, 16, 22
Gorilla Nation Media LLC 14
Group Logic 22, 23
HTC Corp. 12
IDC 8, 25
Infosys Technologies Ltd. 6
Intel Corp. 4, 12, 20
J Gold Associates LLC 10
Janco Associates Inc. 2
JobFox Inc. 25
Jupitermedia Corp. 20
Kentucky Justice and Public Safety Cabinet 6
Kraft Foods Inc. 22
KRvW Associates LLC 8
LANrev LP 22
Lenovo Group Ltd. 5, 19
LinkedIn Corp. 5
Microsoft Corp. 4, 6, 16, 25
National Association of Software and Services Companies 5
National Association of State Chief Information Officers 25
Net Applications Inc. 22
Nike Inc. 20
Nissan North America Inc. 5
Nokia Corp. 12
Open Handset Alliance 10
Oracle Corp. 4, 22
Parallels Inc. 20, 22
PricewaterhouseCoopers 26
Project Management Perspectives LLC 26
Q-layer NV 5
RallyDev.com 16
RealNetworks Inc. 12
Research In Motion Ltd. 12
San Antonio International Airport 26
Satyam Computer Services Ltd. 5
Serena Software Inc. 19
Shopzilla.com 14
Softbank Mobile Corp. 10
Sony Ericsson Mobile Communications AB 12
Sophos PLC 23
Southwest Center for the Hearing Impaired 25
Sprint Nextel Corp. 12
Stanford University 17
StarTribune.com 2
State Street Corp. 2
Sun Microsystems Inc. 5
Symbian Foundation 12
Tandberg ASA 26
Technology Business Research Inc. 22
Texas Department of Public Safety 26
The Home Depot Inc. 2
The Walt Disney Co. 20, 22
T-Mobile USA Inc. 12
Toshiba Corp. 12
Toyota Motor Corp. 16
Trend Micro Inc. 5
Twitter Inc. 8, 36
U.S. Department of Defense 17
U.S. Department of Justice 6
U.S. Department of the Treasury 6
Unisys Corp. 25
University of Washington School of Law 6
Verizon Wireless 12
Vital Signs Inc. 25
VMware Inc. 6, 20
Vodafone Group PLC 10
Werner Enterprises Inc. 19
Wipro Ltd. 6, 25
Yale School of Management 22

CA ca.com/apm C3
Hewlett-Packard hp.com/servers/rethink7 C4
IBM Express Seller ibm.com/systems/simplifyit 21
IBM Express Seller ibm.com/systems/simplifyit 23
IBM IT Campaign ibm.com/green/services 7
IBM IT Campaign ibm.com/green/collaboration 9
IBM IT Campaign ibm.com/green/software 11
IBM IT Campaign ibm.com/green/soa 13
InterSystems InterSystems.com/Connect12A 15
Microsoft Unified Communication microsoft.com/voip C2
SunGard Availability Services www.availability.sungard.com 31
Trend Micro trendmicro.com/thinAgain 29

This index is provided as an additional service. The publisher does not assume any liability for errors or omissions.

Periodical postage paid at Framingham, Mass., and other mailing offices. Posted under Canadian International Publication agreement PM40063731. **CANADIAN POSTMASTER:** Please return undeliverable copy to PO Box 1632, Windsor, Ontario N9A 7C9. Computerworld (ISSN 0010-4841) is published weekly, except for combined issues in November and the last week and first week of each of the following months: December/January, March/April, May/June, June/July, and August/September by Computerworld, Inc., 1 Speen Street, Box 9171, Framingham, Mass. 01701-9171. Copyright 2009 by Computerworld Inc. All rights reserved. Computerworld can be purchased on microfilm and microfiche through University Microfilms Inc., 300 N. Zeeb Road, Ann Arbor, Mich. 48106. Computerworld is indexed. Back issues, if available, may be purchased from the circulation department.

Photocopy rights: permission to photocopy for internal or personal use is granted by Computerworld Inc. for libraries and other users registered with the Copyright Clearance Center (CCC), provided that the base fee of $3 per copy of the article, plus 50 cents per page, is paid directly to Copyright Clearance Center, 27 Congress St., Salem, Mass. 01970. Reprints (minimum 100 copies) and permission to reprint may be purchased from Ray Trynovich, Computerworld Reprints, c/o The YGS Group, Greenfield Corporate Center, 1808 Colonial Village Lane, Lancaster, Pa., 17601, (800) 290-5460, Ext. 148, Fax: (717) 399-8900, Web site: www.reprintbuyer.com. E-mail: computerworld@theygsgroup.com. Requests for missing issues will be honored only if received within 60 days of issue date. Subscription rates: $5 per copy; U.S. – $99.99 per year; Canada – $130 per year; Central & So. America, $250 per year; Europe – $295 per year; all other countries – $295 per year. Subscriptions call toll-free (888) 559-7327. **POSTMASTER:** Send Form 3579 (Change of Address) to Computerworld, PO Box 3500, Northbrook, Ill. 60065-3500.

COMPUTERWORLD

HEADQUARTERS
P.O. Box 9171, 1 Speen Street
Framingham, MA 01701-9171
(508) 879-0700
Fax (508) 875-4394

President/CEO
Matthew J. Sweeney
(508) 271-7100

Executive Assistant to the President/CEO
Diana Cooper
(508) 820-8522

Vice President/Publisher Integrated Programs & Events
John Amato
(508) 820-8279

Vice President/ General Manager Online
Martha Connors
(508) 620-7700

Vice President, Marketing
Matt Duffy
(508) 820-8145

Editor in Chief
Scot Finnie
(508) 628-4868

Vice President, Custom Content
Bill Laberis
(508) 820-8669

Vice President, Human Resources
Julie Lynch
(508) 820-8162

Executive Vice President, Strategic Programs
Ronald L. Milton
(508) 820-8661

Vice President/Group Publisher Computerworld.com
Gregg Pinsky
(508) 271-8013

Executive Vice President/COO
Matthew C. Smith
(508) 820-8102

IDG

International Data Group Chairman of the Board
Patrick J. McGovern

CEO, IDG Communications
Bob Carrigan

Computerworld is a business unit of IDG, the world's leading technology media, research and events company. IDG publishes more than 300 magazines and newspapers and offers online users the largest network of technology-specific sites around the world through IDG.net (*www.idg.net*), which comprises more than 330 targeted Web sites in 80 countries. IDG is also a leading producer of 168 computer-related events worldwide, and IDG's research company, IDC, provides global market intelligence and advice through 51 offices in 43 countries. Company information is available at *www.idg.com*.

Sales Offices

President/CEO
Matthew J. Sweeney (508) 271-7100
Fax (508) 270-3882

Vice President/Publisher, Integrated Programs & Events
John Amato (508) 820-8279
Fax (508) 626-8524

Senior Sales Operations Manager
Dawn Cora (508) 820-8133

■ NORTHWESTERN STATES
■ BAY AREA
■ SOUTHWESTERN STATES
■ CENTRAL STATES
Vice President/ Associate Publisher of Custom Programs
Bill Hanck (949) 442-4006

Mailing Address
19200 Von Karman Avenue
Suite 360, Irvine, CA 92612
Fax (949) 476-8724

Account Director
Lauren Guerra (415) 978-3306

Senior Sales Associate, Integrated Programs
Chris Da Rosa (415) 978-3304

Mailing Address
501 Second Street, Suite 114
San Francisco, CA 94107
Fax (415) 543-8010

Senior Sales Associate, Integrated Programs
Emmie Hung (415) 978-3308

■ SOUTHEASTERN STATES
Vice President, Integrated Programs
Lisa Ladle-Wallace (904) 284-4972

Mailing Address
5242 River Park Villas Drive
St. Augustine, FL 32092
Fax (800) 779-8622

Senior Sales Associate, Integrated Programs
Jess Roman (508) 271-7108

Mailing Address
P.O. Box 9171, 1 Speen Street
Framingham, MA 01701
Fax (508) 270-3882

■ NEW ENGLAND STATES
Vice President, Integrated Programs
Deborah Crimmings (508) 271-7110

Senior Sales Associate, Integrated Programs
Jess Roman (508) 271-7108

Mailing Address
P.O. Box 9171, 1 Speen Street
Framingham, MA 01701
Fax (508) 270-3882

■ METRO NEW YORK
■ EASTERN CENTRAL STATES/INDIANA
Vice President, Integrated Programs
Peter Mayer (201) 634-2324

Senior Sales Associate, Integrated Programs
John Radzniak (201) 634-2323

Mailing Address
650 From Road, Suite 225
Paramus, NJ 07652
Fax (201) 634-9289

CIRCULATION/DISTRIBUTION
Vice President
Debbie Winders (508) 820-8193

Circulation Manager
Diana Turco (508) 820-8167

Distribution and Postal Affairs
Michelle Fuller (508) 628-4757

PRODUCTION
Vice President, Production
Carolyn Medeiros

Production Manager
Kim Pennett

Print Display Advertising
(508) 820-8232
Fax (508) 879-0446

STRATEGIC PROGRAMS AND EVENTS
Vice President, Business Development John Vulopas

Vice President, Strategic Programs & Events Ann Harris

Vice President, Event Marketing and Conference Programs Derek Hulitzky

Senior Director, Event Management
Michael Meleedy

Executive Programs Specialist
Executive Assistant Kelly McGill
Fax (508) 626-8524

ONLINE ADVERTISING
Vice President/Associate Publisher
Sean Weglage (415) 978-3314
Fax (415) 543-8010

Online Sales Directors
James Kalbach
(610) 971-1588

Jennell Hicks
(415) 978-3309
Fax (415) 543-8010

Online Sales Manager
Matthew Wintringham
(508) 820-8218
Fax (508) 270-3882

Account Services Director
Bill Rigby (508) 820-8111
Fax (508) 270-3882

Online Sales Assistant
Joan Olson (508) 270-7112
Fax (508) 270-3882

IT CAREERS
Senior Sales Operations Manager
Dawn Cora (508) 820-8133
Fax (508) 626-8524

LIST RENTAL
Postal and E-mail
Rich Green (508) 370-0832
rgreen@idglist.com

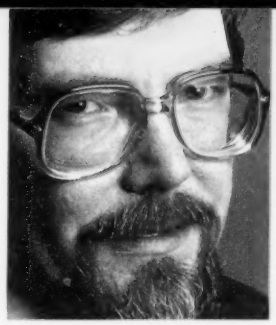
Mailing Address
IDG List Services, P.O. Box 9151
Framingham, MA 01701-9151
Fax (508) 370-0020

Customer Service
(888) 559-7327 toll free
Local or outside U.S. (847) 559-1573
E-mail: cw@omeda.com

■ FRANKLY SPEAKING

Frank Hayes

Password Fail



PLEASE TELL ME this isn't happening in 2009: Last week, an 18-year-old student reportedly used a password-guessing program to get into the account of a Twitter employee (see story, page 8). From there, the teen cracker hijacked the accounts of President-elect Barack Obama, Britney Spears, Fox News and 30 other Twitter users.

A password-guessing program? That is *so* 1983.

According to *Wired* blogger Kim Zetter, who tracked down the cracker calling himself "GMZ" and interviewed him via e-mail, the crack was a marvel of old-school simplicity. GMZ noticed that one Twitter user named "Crystal" was following a lot of Twitter feeds. GMZ went to the Twitter log-in page, typed in Crystal's name, pointed his homebrew guessing program at the password field, and went to bed.

When he checked the next morning, he discovered the correct password was *happiness* — and he was in.

He also discovered that Crystal wasn't just a Twitter user. She was a support employee, and her account had access to an administrative tool that could reset the password for any Twitter user. GMZ says he didn't access any other accounts himself — but he did give access to fellow hackers.

Twitter regained control only after several hours.

Scary, isn't it? Not that Obama and Fox News had phony messages sent out on their Twitter feeds — that turned out to be prankster-level stuff. What's scary is that systems administrators ignored so much basic password security on a system with millions of users.

You *don't* let your employees pick easily guessable passwords like *happiness*. You *don't* allow anyone to keep trying to log in for hours after repeated password failures. And you *don't* use the same log-in interface for powerful employee accounts that you use for ordinary customers. You just *don't*.

■ The idea that sysadmins could be so sloppy that they'd get hit by this kind of '80s-era hack is mind-boggling – right?

The idea that sysadmins could be so sloppy that they'd get hit by this kind of '80s-era hack is mind-boggling — right?

Hold that thought.

Now consider this: We're entering the second full year of a recession. When it comes to staffing, we've cut the fat, we've cut the muscle, and we're starting to saw away at bone. That means in even the best of corporate IT shops, we're starting to cut corners.

There's always too much to do in IT. It's all about choosing priorities. Operations — keeping everything running — is always at the top of the list. Support — helping out individual users with problems — is usually next. These two things have big constituencies on the business side because, if they fail, things will happen and business people will notice. And then they'll howl.

But security doesn't have a big constituency. If we cut corners on security, no one may notice, because nothing bad may happen right away.

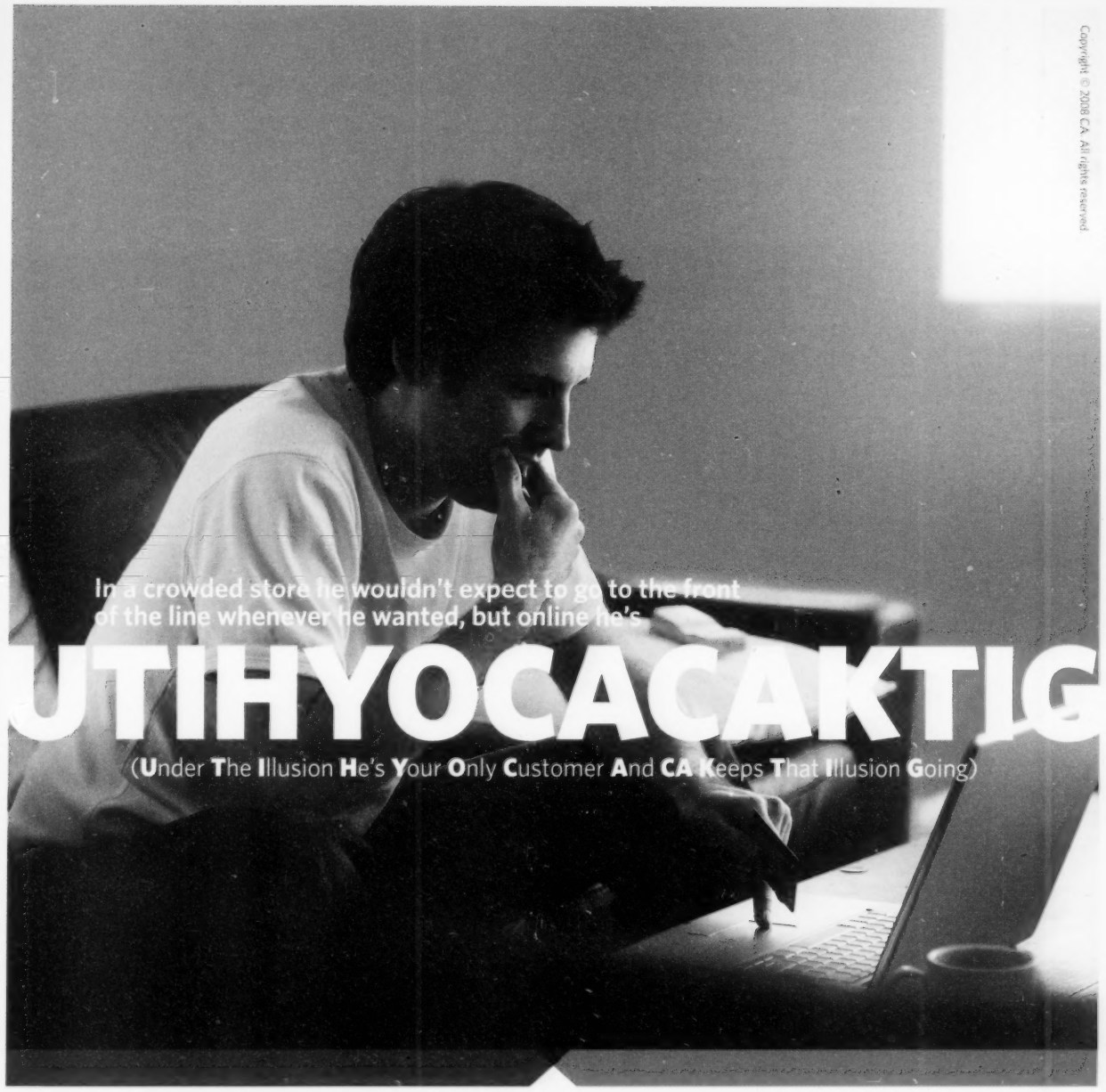
No one on the business side will howl until something does happen. And it's likely to be something very, very bad.

We don't know how Twitter, a start-up with 31 employees, got sloppy with password security. But it's not hard to imagine how it could happen in a big corporate IT shop. A little too much corner-cutting in the face of way too much work is all it would take.

That means we need to be vigilant even on simple security — and even when there's no demand for it from the business side. We have to keep passwords hard to guess, lock out repeated log-in attempts and keep powerful IT accounts especially secure.

Because it *is* 2009, brutal economy and all. But if we slip up on something as simple as password security, it could feel like 1983 all over again. ■

Frank Hayes *is* Computerworld's *senior news columnist. Contact him at frank_hayes@computerworld.com.*


In a crowded store he wouldn't expect to go to the front of the line whenever he wanted, but online he's
UTIHYOCACAKTIG
(Under The Illusion He's Your Only Customer And CA Keeps That Illusion Going)

Copyright © 2008 CA. All rights reserved.

CA Application Performance Management Solution. The Web is different. People just don't have the patience for anything less than silky smooth, wait-free clicking—and with CA's Application Performance Management (APM) solution that's just what you'll give them. Because with a total view of your business-critical Web applications, and a deeper understanding of your customers' actual experience, you'll make that experience consistently better. You'll pinpoint problems at their root cause—from browser to back end—and fix them before your customers feel them. And most of all, you'll ensure the online face of your company is making you look good. Get the latest information on the industry-leading APM solution at **ca.com/apm**.

GOVERN · **MANAGE** · SECURE

ca | wily technology

ALTERNATIVE THINKING ABOUT SYSTEM POTENTIAL:

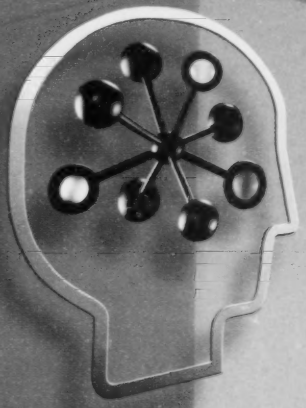
See eye to eye with your budget—without limiting your vision.

Compromising is fine. For other people. But now you can watch your bottom line, while still getting a look into the future. The HP portfolio of solutions erases the gap between cost and innovation, while delivering reliable ProLiant technology, all at prices that require a second look. So, while others try to think outside the box—we're rethinking what goes on inside it.

Technology for better business outcomes.

intel Xeon inside™

Powerful. Efficient.



HP BladeSystem c3000 Enclosure

$3,959 (Save $1,863)

Lease for just $110/mo.

Smart Buy [PN: 481658-001]

- Supports up to 8 server blade devices in a 6U enclosure
- 3-year limited warranty

HP ProLiant BL260c Server

$899 (Save $631)

Lease for just $22/mo.

Smart Buy [PN: 480965-B21]

- Powered by the Intel® Xeon® Processor
- 2GB memory
- 1-year limited warranty

HP ProLiant DL120 G5 Server

$849 (Save $339)

Lease for just $21/mo.

Smart Buy [PN: 470064-763]

- Powered by the Intel® Core™ 2 Duo Processor
- One 250GB SATA hard drive
- 2GB memory
- 1-year limited warranty

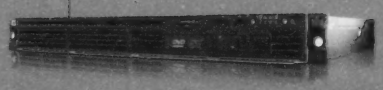
HP StorageWorks DAT160 USB Tape Drive

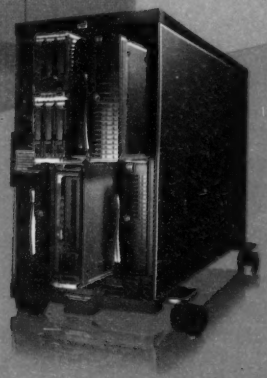
$729 (Save $80)

Lease for just $18/mo.

Smart Buy [PN: Q1580SB]

- One-Button Disaster Recovery feature easily restores lost files, applications
- Store up to 160GB on a single cartridge, while backing up to 50GB/hr.





See additional HP models which feature small form factor, high-performance SAS hard drives.

To learn more, call 1-866-625-0809 or visit hp.com/servers/rethink7

hp

Prices shown are HP Direct prices, reseller and retail prices may vary. Prices shown are subject to change and do not include applicable state and local taxes or shipping to recipient's address. Offers cannot be combined with any other offer or discount and are good while supplies last. All featured offers available in U.S. only. Savings based on HP published list price of configure-to-order equivalent (Enclosure: $5,822 – $1,863 instant savings = SmartBuy price of $3,959; Blade Server: $1,530 – $631 instant savings = SmartBuy price of $899; Rack Server: $1,188 – $339 instant savings = SmartBuy price of $849; Tape Drive: $809 – $80 instant savings = SmartBuy price of $729).

Intel, the Intel logo, Xeon and Xeon Inside are trademarks of Intel Corporation in the U.S. and other countries.

© 2008 Hewlett-Packard Development Company, L.P. The information contained herein is subject to change without notice.